

| | | | |
|--------------------------------------|---------------------|---------------------|------------|
| Part A. PERSONAL INFORMATION | | CV date | 24/09/2019 |
| First and Family name | Oresti Baños Legrán | | |
| Social Security, Passport, ID number | - | Age | 33 |
| Researcher numbers | Researcher ID | - | |
| | Orcid code | 0000-0001-5434-4253 | |

A.1. Current position

| | | | |
|--------------------------------|--|---------------|---------------|
| Name of University/Institution | Universidad de Granada | | |
| Department | Arquitectura de Computadores / ETS Ingeniería Informática y Telecomunicación | | |
| Address and Country | Calle Periodista Rafael Gómez Montero, nº 2 | | |
| Phone number | +34628682565 | E-mail | oresti@ugr.es |
| Current position | Associate Professor | Starting date | 01/03/2019 |
| Espec. cód. UNESCO | 1203 / 3304 | | |
| Palabras clave | Wearable Computing. Mobile Computing. Ubiquitous Computing. Human Computer Interaction. Machine Learning. Data Mining. Digital Health. | | |

A.2. Education

| PhD | University | Year |
|---|-----------------------|------|
| PhD in Computer Science (Cum Laude) | University of Granada | 2014 |
| MSc in Computer and Network Engineering | University of Granada | 2011 |
| MSc in Electronic Engineering | University of Granada | 2011 |
| MSc in Telecommunication Engineering | University of Granada | 2009 |

A.3. JCR articles, h Index, thesis supervised

Total cites: 799 (Scopus), 1291 (Google Scholar)

Average citations over the last five years: 159.8 (Scopus), 258.2 (Google Scholar)

Papers ranked in the first quartile (Q1): 17 (+ 6 Q2 + 7 Q3) (ISI WoS)

h-index: 15 (Scopus), 18 (Google Scholar)

Part B. CV SUMMARY

Oresti Baños is an Associate Professor of Computational Behaviour Modelling at the University of Granada (Spain, 2019-present). He is also a Senior Research Scientist affiliated with the Centre for Information and Communication Technologies of the University of Granada (CITIC-UGR). He is a Research Collaborator at the University of Twente (Netherlands, 2018-present). He is a former Assistant Professor of Creative Technology and a Telemedicine Research Scientist at University of Twente (Netherlands, 2016-2018). Here, he worked for the Biomedical Signal and Systems Group (BSS), the Centre for Telematics and Information Technology (CTIT), the Research Centre for Biomedical Technology and Technical Medicine (MIRA), and the Centre for Monitoring and Coaching (CMC). He was a Postdoctoral Research Fellow at Kyung Hee University (South Korea, 2014-2016), a Predoctoral Research Fellow at the CITIC-UGR (Spain, 2010-2014) and a Visiting Scholar at the Technical University of Eindhoven (Netherlands, 2012), the Swiss Federal Institute of Technology Zurich (Switzerland, 2011), and the University of Alabama (USA, 2011). He holds three Master's degrees in telecommunications (2009), electrical (2011) and computer networking engineering (2011) and a PhD in computer science (2014), all with honors, from the University of Granada. Most recently, he has been Principal Investigator of the Dutch R&D project HoliBehave, Workpackage Lead of the EU-H2020 project COUCH and Technical Coordinator of the Korean

project Mining Minds. He has participated in more than 20 Spanish, Korean, Dutch and FP7/H2020 European digital health and behavioural computing-related projects such as HPCBIO, AdaBIO, DSIPA-BIO, AmiVital, Symbionics, OPPORTUNITY, XOSOFT, eNHANCE or COUCH.

He is author of more than 80 papers, most of them indexed in top-ranked international conferences and journals. He is co-organiser of several digital health workshops such as SUT4Coaching or Health-i-Coach and he is also a member of the organising committee of a number of international conferences including PervasiveHealth, IWBBIO or UCAMI. He is also Associate Editor of the journal of Human-centric Computing and Information Sciences (Springer) and Guest Editor in top-tier journals such as SENSORS (MPDI), Ambient Intelligence and Humanized Computing (Springer) and Computer (IEEE). His research works on the intersection of wearable, ubiquitous, and mobile computing with data mining and artificial intelligence for digital health and wellness applications. He is particularly interested in human-aware computing, behaviour and context modelling, intelligent coaching systems, and smart pervasive sensing.

Part C. RELEVANT MERITS

C.1. Journal papers (selection from the last five years, Q1 and Q2 SCIE-ranked)

Bailon, C., Damas, M., Pomares, H., Sanabria, D., Perakakis, P., Goicoechea, C., **Banos, O.** Smartphone-Based Platform for Affect Monitoring through Flexibly Managed Experience Sampling Methods. *Sensors*, vol. 19, no. 3430, pp. 1-23 (2019) {IF=3.031, Q1}

Bang, J., Hur, T., Kim, D., Huynh-The, T., Lee, J., **Banos, O.**, Kim, J.-I., Lee, S. Adaptive Data Boosting Technique for Robust Personalized Speech Emotion in Emotionally-Imbalanced Small-Sample Environments. *Sensors*, vol. 18, no. 11, pp. 1-21 (2018) {IF=3.031, Q1}

Banos, O., Nugent, C. M-Coaching: Towards the Next Generation of Mobile-Driven Healthcare Support Services. *Computer*, vol. 51, no. 8, pp. 14-17 (2018) {IF=3.564, Q1}

Banos, O., Hermens, H., Nugent, C., Pomares, H. Smart Sensing Technologies for Personalised e-Coaching. *Sensors*, vol. 18, no. 1751, pp. 1-4 (2018) {IF=3.031, Q1}

Banos, O., Nugent, C. E-Coaching for Health. *Computer*, vol. 51, no. 3, pp. 12-15 (2018) {IF=3.564, Q1}

Hussain, J., Ul-Hassan, A., Ali, R., Afzal, M., Hussain, S., Bang, J., **Banos, O.**, Lee, S. Model-Based Adaptive User Interface based on Context and User Experience Evaluation. *Journal on Multimodal User Interfaces*, vol. 12, no. 1, pp. 1-16 (2018) {IF=2.020, Q2}

Siddiqi, M. H., Ali, M., Abdelrahman Eldib, M. E., Khan, A., **Banos, O.**, Khan, A. M., Lee, S., Choo, H. Evaluating Real-life Performance of the State-of-the-art in Facial Expression Recognition using a Novel YouTube-based Datasets. *Multimedia Tools and Applications*, vol. 77, no. 1, pp. 917-937 (2018) {IF=2.101, Q2}

Hur, T., Bang, J., Kim, D., **Banos, O.**, Lee, S. Smartphone Location-Independent Physical Activity Recognition based on Transportation Natural Vibration Analysis. *Sensors*, vol. 17, no. 4, pp. 1-21 (2017) {IF=2.475, Q2}

Villalonga, C., Pomares, H., Rojas, I., **Banos, O.** MIMU-Wear: Ontology-based Sensor Selection for Real-World Wearable Activity Recognition. *Neurocomputing*, vol. 250, pp. 76-100 (2017) {IF=3.317, Q1}

Huynh-The, T., **Banos, O.**, Sungyoung, L., Byeong Ho, K., Eun, S. NIC: A Robust Background Extraction Algorithm for Foreground Detection in Dynamic Scenes. *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 27, no. 7, pp. 1478-1490 (2017) {IF=3.599, Q1}

Villalonga, C., Razzaq, M.-A., Ali Khan, W., Pomares, H., Rojas, I., Lee, S., **Banos, O.** Ontology-based High-Level Context Inference for Human Behavior Identification. *Sensors*, vol. 16, no. 10, pp. 1-19 (2016) {IF: 2.677, Q1}

Huynh-The, T., **Banos, O.**, Sungyoung, L., Yoon, Y., Le-Tien, T. Improving Digital Image Watermarking by Means of Optimal Channel Selection. *Expert Systems with Applications*, vol. 62, pp. 177-189 (2016) {IF=3.928, Q1}

Banos, O., Villalonga, C., Bang, J. H., Hur, T. H., Kang, D., Park., S.-B., Hyunh-The, T., Vui, L. B., Amin, M.-B., Razzaq, M.-A., Ali Khan, W., Hong, C.-S., Lee, S. Human Behavior Analysis by means of Multimodal Context Mining. *Sensors*, vol. 16, no. 8, pp. 1-19 (2016) {IF=2.677, Q1}

Bilal Amin, M., **Banos, O.**, Ali Khan, W., Rizvi, B. A., Gong, J., Mao, B., Cho, S. H., Hussain, S., Ali, T., Aktar, U., Chung, T. C., Lee, S. On curating multimodal sensory data for personalized health and wellness services. *Sensors*, vol. 16, no. 7, pp. 1-27 (2016) {IF=2.677, Q1}

Huynh-The, T., **Banos, O.**, Le, B. V., Bui, D. M., Sungyoung, L., Yoon, Y., Lee, S. Traffic Behavior Recognition Using the Pachinko Allocation Model. *Sensors*, vol. 15, no. 6, pp. 16040-16059 (2015) {IF=2.033, Q1}

Bilal Amin, M., Ali Khan, W., Hussain, S., Bui, D. M., **Banos, O.**, Kang, B. H., Lee, S. Evaluating Large-scale Biomedical Ontology Matching Over Multicore Platforms. *IETE Technical Review*, Online (2015) {IF=1.304, Q2}

Banos, O., Moral-Munoz, J.A., Diaz-Reyes, I., Arroyo-Morales, M., Damas, M., Herrera-Viedma, E., Hong, C.S., Lee, S., Pomares, H., Rojas, I., Villalonga, C. mDurance: a Novel Mobile Health System to Support Trunk Endurance Assessment. *Sensors*, vol. 15, pp. 13159-13183 (2015) {IF=2.033, Q1}

Banos, O., Damas, M., Guillen, A., Herrera, L.J., Pomares, H., Rojas, I., Villalonga, C. Multi-sensor fusion based on asymmetric decision weighting for robust activity recognition. *Neural Processing Letters*, vol. 42, no. 1, pp. 5-26 (2015) {IF=1.747, Q2}

Banos, O., Toth M. A., Damas, M., Pomares, H., Rojas, I. Dealing with the effects of sensor displacement in wearable activity recognition. *Sensors*, vol. 14, no. 6, pp. 9995-10023 (2014) {IF=2.245, Q1}

Banos, O., Galvez, J. M., Damas, M., Pomares, H., Rojas, I. Window size impact in activity recognition. *Sensors*, vol. 14, no. 4, pp. 6474-6499 (2014) {IF=2.245, Q1}

C.2. Projects (selected)

International

Role: Work Package Lead

Project: Council of Coaches (COUCH)

Funded by: European Commission

Principal Investigator: Hermens, Hermie

Reference: H2020 #769553

Budget: 3.704.000,00 €

Duration: 01/09/2017 - Presente

Role: Coordinator

Project: Development of Mining Minds Core Technology Exploiting Personal Big Data for Health and Wellness Support (Mining Minds)

Funded by: Korean Ministry of Trade, Industry and Energy (MOTIE)

Principal Investigator: Lee, Sungyoung

Reference: #10049079

Budget: 4.500.000,00 USD

Duration: 01/09/2014 - 31/12/2015

Role: Researcher

Project: Soft modular biomimetic exoskeleton to assist people with mobility impairments (XOSOFT)

Funded by: European Commission

Principal Investigator: Ortiz, Jesus

Reference: H2020 #688175

Budget: 5.420.000,00 €

Duration: 01/01/2017 - 01/03/2018

Role: Researcher

Project: Intention based enhancement of reaching and grasping in physically disabled people, personalized to maximize user performance (eNHANCE)

Funded by: European Commission

Principal Investigator: Koopman, Bart

Reference: H2020 #644000

Budget: 3.916.055,00 €

Duration: 01/01/2016 - 01/03/2018

Role: Researcher

Project: Wireless Health Monitoring (WHM)

Funded by: Euregio, FEDER

Principal Investigator: Gloesekoetter, Peter

Reference: INTERREG IV, I-1-02=091

Budget: 2.000.000,00 €

Duration: 01/04/2012 - 02/11/2012

Role: Researcher

Project: HPC-Europa2: Pan-European research infrastructure on high performance computing for 21st century science
Reference: FP7 #228398
Funded by: European Commission
Budget: 13.061.754,00 €
Principal Investigator: Garofalo, Francesca
Duration: 01/02/2012 - 02/05/2012

Role: Researcher

Project: Activity and Context Recognition with Opportunistic Sensors Configurations (OPPORTUNITY)
Reference: FP7 grant #225938
Funded by: European Commission
Budget: 1.508.768,00 €
Principal Investigator: Roggen, Daniel
Duration: 01/09/2011 - 31/12/2011

National (Role: Researcher)

Project: Advances in HPC for Machine Learning based on Heterogeneous Data Sources. Applications in Healthcare and Wellbeing
Reference: TIN2015-71873-R
Funded by: Spanish Ministry of Science and Education
Budget: 117.491,00 €
Principal Investigator: Herrera, Luis Javier
Duration: 01/01/2016 - presente

Project: ehp-MOBE: Energy-aware High Performance Multi-objective Optimization in Heterogeneous Computer Architectures. Applications in Biomedical Engineering
Reference: TIN2015-67020-P

Funded by: Spanish Ministry of Science and Education
Budget: 98.864,00 €
Principal Investigator: Ortega, Julio
Duration: 01/01/2016 - presente

Project: Symbionics: creating Co-Adaptive Assistive Devices
Reference: P12-03
Funded by: Applied and Engineering Sciences (TTW) division of the Netherlands Organisation for Scientific Research (NWO)
Budget: 3.980.000,00 €
Principal Investigator: Koopman, Bart
Duration: 01/01/2016 - 01/03/2018

Project: Development of advanced intelligent systems in high performance platforms. Application to bioinformatics and biomedical problems
Reference: SAF2010-20558
Funded by: Spanish Ministry of Science and Education
Budget: 181.500,00 €
Principal Investigator: Rojas, Ignacio
Duration: 01/01/2011 - 01/06/2014

C.3. R&D contracts (selected)

Role: Principal Investigator

Project: HoliBehave: Platform for the holistic monitoring, processing and mining of human behaviour to estimate trajectories of functioning
Reference: NA
Funded by: Outsourcing Center for Telematics and Information Technology of the University of Twente (CTIT)
Budget: 65.000,00 €
Principal Investigator: Oresti Baños
Duration: 01/01/2016 - 31/12/2016

Role: Researcher

Project: A Healthy Mind in a Healthy Body
Reference: NA
Funded by: Menzis Health Insurance
Budget: 50.000,00 €
Principal Investigator: van Det, Marc
Duration: 01/01/2016 - presente

Role: Researcher

Project: Digital and Personal Environment for Health and Welfare (AmIVital)
Reference: CENIT2007-1010 (TID) OTRI2491; CENIT2007-1010 (TID) OTRI2553
Funded by: Subcontratas Programa CENYT del CDTI
Budget: 24.000.000,00 €
Principal Investigator: Prieto, Alberto
Duration: 01/09/2010 - 31/12/2010

C.5. Other merits (selected)

- Univ. of Granada Outstanding PhD Award (2017), Excellence in Research Award (2019)
- Associate/Guest Editor: Human-centric Computing and Information Sciences (Springer), Computer (IEEE), Ambient Intelligence and Humanized Computing (Springer), Sensors (MPDI), International Journal of Distributed Sensor Networks (SAGE)
- Co-chair of: International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmI2018), Workshop on Intelligent Technologies for Coaching in Health (Health-i-Coach2017), Conference Track on Ambient Intelligence in Health (AmIHealth2017), Workshop on Smart Ubiquitous Technologies for Human Behaviour Coaching (SUT4Coaching2016), Workshop on Human Behavior Monitoring, Analysis and Understanding (HBMAU2016)

- Program Committee for: EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth2016, PervasiveHealth2017, PervasiveHealth2018), International Work-Conference on Artificial Neural Networks (IWANN2017), International Conference on Body Area Networks (BodyNets 2016), International Conference on Ubiquitous Computing and Communications (IUCC2016), ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp2015/UbiComp2016)

CURRICULUM VITAE



Name: Oresti Baños
Birth date and place: 29/06/1986, Hannover, Germany
Nationality: Spanish
Mail address: Room 26, School of Informatics and Telecommunications Engineering, University of Granada, E-18071 Granada, Spain
E-mail: oresti@ugr.es
Web: <http://orestibanos.com/>

EDUCATION

PhD degree: Postgraduate Programme in Computer and Network Engineering
Thesis title: Robust Expert Systems for more Flexible Real-World Activity Recognition
Institution: University of Granada *Start/end dates:* 2010/2014 *GPA:* CUM LAUDE

Master degree: Computer and Network Engineering
Thesis title: Automatic Recognition of Daily Physical Activity Applied to E-Health and Telecare Applications
Institution: University of Granada *Start/end dates:* 2009/2011 *GPA:* 9.46 out of 10

Master degree: Electronic Engineering
Thesis title: Noninvasive Blood Pressure Estimation through Fusion of Multimodal Physiological Data
Institution: University of Granada *Start/end dates:* 2009/2011 *GPA:* 8.51 out of 10

Master degree: Telecommunication Engineering
Thesis title: Design and Implementation of Monitoring Techniques for E-Health Environments
Institution: University of Granada *Start/end dates:* 2004/2009 *GPA:* 7.98 out of 10

PROFESSIONAL EXPERIENCE

Current position

Position: Associate Professor *Institution:* University of Granada
Start date: 01/03/2019 *Faculty:* Information Technology and Telecommunications Eng.
Dedication: Full-time *Lab:* Computer Architecture & Computer Technology

Current affiliations

Position: Senior Researcher
Institution: Research Center for Information and Communications Technologies - University of Granada (CITIC-UGR) *Duration:* 01/03/2018 - present

Position: Senior Researcher (Collaborator)
Institution: Biomedical Signal and Systems (Telemedicine Group), Faculty of Electrical Eng., Math and Computer Science, University of Twente *Duration:* 01/03/2018 - present

Previous positions

Position: Assistant Professor
Institution: Computer Architecture & Computer Technology Faculty of Information Technology and Telecommunications Eng. University of Granada *Duration:* 16/02/2018 - 28/02/2019

Position: Assistant Professor
Institution: Biomedical Signal and Systems (Telemedicine Group) Faculty of Electrical Eng., Math and Computer Science, University of Twente *Duration:* 01/01/2016 - 15/02/2018

Position: Senior Researcher

Institution: Centre for Monitoring and Coaching (CMC)
of the University of Twente *Duration:* 01/01/2016 - 15/02/2018

Position: Senior Researcher

Institution: Research Centre for Biomedical Technology and
Technical Medicine (MIRA) of the University of Twente *Duration:* 01/01/2016 - 15/02/2018

Position: External Faculty Member

Institution: Doctoral Programme in Information and Communication
Technologies, University of Granada *Duration:* 01/09/2014 - 15/02/2018

Position: Senior Researcher

Institution: Centre for Telematics and Information
Technology (CTIT) of the University of Twente *Duration:* 01/01/2016 - 31/12/2017

Position: Postdoctoral Research Fellow

Institution: Grand-ICT Center of Intelligent Interaction for Life
Companionship Experience,
Kyung Hee University (KHU) *Duration:* 01/09/2015 - 31/12/2015

Position: Postdoctoral Research Fellow

Institution: BK21 PLUS SW Research Institute for Global
and Creative Human Resource Incubation,
Kyung Hee University (KHU) *Duration:* 01/09/2014 - 31/12/2015

Position: Project Manager

Institution: Kyung Hee University (KHU) *Duration:* 01/09/2014 - 31/12/2015

Position: Postdoctoral Research Fellow

Institution: Research Center for Information and Communications
Technologies - University of Granada (CITIC-UGR) *Duration:* 01/05/2014 - 31/08/2014

Position: Predoctoral Research Fellow

Centre: Research Center for Information and Communications
Technologies - University of Granada (CITIC-UGR) *Duration:* 01/09/2010 - 31/08/2014

RESEARCH

Individual Fellowships

Grant: Grand ICT Programme Fellowship *Funded by:* Korean National Research Foundation
Centre: Kyung Hee University (KHU) *Duration:* 01/09/2015 - 31/12/2015

Grant: Brain Korea 21+ (BK21+) Programme Fellowship *Funded by:* Korean National Research Foundation
Centre: Kyung Hee University (KHU) *Duration:* 01/09/2014 - 31/12/2015

Grant: University Faculty Training (FPU) Programme Fellowship *Funded by:* Spanish Ministry of Education
Centre: Research Center for Information and Communications
Technologies of the University of Granada (CITIC-UGR) *Duration:* 12/10/2010 - 31/08/2014

Grant: High Performance Computing-Europa2 Programme Fellowship *Funded by:* European Commission
Centre: Technical University of Eindhoven (Tue) *Duration:* 01/02/2012 - 02/05/2012

Grant: FPU Programme - Overseas Programme Fellowship *Funded by:* Spanish Ministry of Education
Centre: Swiss Federal Institute of Technology Zurich (ETHZ) *Duration:* 01/09/2011 - 31/12/2011

Grant: Doctoral JA Excellence Grant *Funded by:* Regional Government of Andalusia
Centre: University of Granada (UGR) *Duration:* 01/09/2010 - 11/10/2010

Grant: UGR Graduate Research Assistantship *Funded by:* University of Granada
Centre: University of Granada (UGR) *Duration:* 01/06/2010 - 31/05/2011

Research Visits

Centre: Department of Signal Processing Systems (SPS), Activity and Context recognition Technologies Lab (ACTLab) Technical University of Eindhoven (TUE) *Location:* Eindhoven (Netherlands)
Person in charge of Host institution: Prof. Dr. Oliver Amft *Duration:* 01/02/2012 - 02/05/2012

Centre: Department of Information Technology and Electrical Engineering (D-ITET), Wearable Computing Lab, Swiss Federal Institute of Technology Zurich (ETHZ) *Location:* Zürich (Switzerland)
Person in charge of Host institution: Prof. Dr. Gerhard Tröster *Duration:* 01/09/2011 - 31/12/2011

Centre: Department of Electrical and Computer Engineering, Computer Laboratory of Ambient and Wearable Systems (CLAWS) University of Alabama *Location:* Tuscaloosa, Alabama (US)
Person in charge of Host institution: Prof. Dr. Edward Sazonov *Duration:* 08/2011

Principal Investigator of R&D Projects

Project title: Platform for the holistic monitoring, processing and mining of human behaviour to estimate trajectories of functioning (HoliBehave) *Reference ID:* CTIT-RSC-2016
Funded by: Center for Telematics and Information Technology *Budget:* 65.000,00 EUR
Principal Investigator: Banos, Oresti *Duration:* 15/12/2016 - 15/12/2017
Partners: University of Twente

Principal Investigator of R&D Contracts

Project title: User Behaviour Sensing, Modelling and Analysis *Reference ID:* OTRI-4071
Funded by: University of Twente *Budget:* 15.000,00 EUR
Principal Investigator: Banos, Oresti *Duration:* 18/09/2018 - 31/08/2020

Coordination of R&D Projects

Project title: Development of Mining Minds Core Technology Exploiting Personal Big Data for Health and Wellness Support (Mining Minds) *Reference ID:* #10049079
Funded by: Korean Ministry of Trade, Industry and Energy (MOTIE) *Budget:* 4.500.000,00 \$
Principal Investigator: Lee, Sungyoung *Duration:* 01/09/2014 - 31/12/2015
Partners: Kyung Hee University, Green Cross Healthcare, TAPACROSS, Korea Institute of Industrial Technology, U2 System, Pohang University of Science and Technology, University of Tasmania, Soongsil University, Korea Creative Content Agency

Workpackage Leadership of R&D Projects

Project title: Council of Coaches (COUCH)
Reference ID: EU-H2020-Health grant #769553
Funded by: European Commission *Budget:* 3.704.000,00 €
Coordinator: Hermens, Hermie *Duration:* 01/09/2017 - 01/09/2020
Partners: University of Twente, Roessingh Research and Development, Danish Board of Technology Foundation, Université Pierre et Marie Curie - Paris 6, University of Dundee, Universitat Politècnica de València, Innovation Sprint

Participation in International R&D Projects

Project title: Intelligent Medical Platform Research Center (IMPRC)
Reference ID: IITP-2017-01629
Funded by: Ministry of Science and ICT *Budget:* 4.636.000,00 \$
Coordinator: Lee, Sungyoung *Duration:* 01/06/2017 - 31/12/2022
Partners: Kyung Hee University, Kwangwoon University, Sejong University, University of Tasmania, Kyung Hee University Medical Center, Asan Medical Center, Kyung Hee University Hospital at Gangdong, Seoul National University Bundang Hospital, Seoul ST. Mary's Hospital, Tapacross, Xii-Lab, Life Semantics, Hein & Dewitt

Project title: Soft modular biomimetic exoskeleton to assist people with mobility impairments (XOSOFT)
Reference ID: EU-H2020-ICT grant #688175
Funded by: European Commission *Budget:* 5.420.000,00 €
Coordinator: Ortiz, Jesus *Duration:* 01/02/2016 - 01/03/2018

Partners: Fondazione Istituto Italiano di Tecnologia, Consejo Superior de Investigaciones Científicas, Saxion University of Applied Science, University of Limerick, Zurich University of Applied Sciences, Roessingh Research and Development, accelopment AG, Geriatrie-Zentrum Erlangen, Össur HF

Project title: Intention based enhancement of reaching and grasping in physically disabled people, personalized to maximize user performance (eNHANCE)

Reference ID: EU-H2020-ICT grant #644000

Funded by: European Commission

Budget: 3.916.055,00 €

Coordinator: Koopman, Bart

Duration: 01/01/2016 - 01/03/2018

Partners: University of Twente, Imperial College of Science, Technology and Medicine, Roessingh Research and Development BV, University College London, Eyebrain, Noldus Information Technology BV, Focal Meditech BV, Hankamp Rehab BV, Bioservo Technologies AB, Hacker Motor GMBH

Project title: Open-Source, Web-Based, Framework for Integrating Applications with Social Media Services and Personal Cloudlets (OPENi)

Reference ID: EU-FP7-ICT grant #317883

Funded by: European Commission

Budget: 3.830.000,00 €

Coordinator: Robson, Eric

Duration: 01/10/2012 - 01/09/2014

Partners: Waterford Institute of Technology, National Technical University of Athens, Fraunhofer Institute for Open Communication Systems, CGI, Ambisense Ltd, Velti, Betapond

Project title: Open Mashup Enterprise service platform for LinkEd data in The Telco domain (OMELETTE)

Reference ID: EU-FP7-ICT grant #257635

Funded by: European Commission

Budget: 5.960.000,00 €

Coordinator: Villalonga, Claudia

Duration: 01/01/2012 - 01/07/2013

Partners: CGI, HUAWEI, SAP, Technical University of Chemnitz, TIE, University of Trento, Technical University of Madrid, The University of Bolton, T-Systems MMS

Project title: Wireless Health Monitoring (WHM)

Reference ID: INTERREG IV, I-1-02=091

Funded by: Euregio, European Regional Development Fund

Budget: 2.000.000,00 €

Coordinator: Gloesekoetter, Peter

Duration: 01/01/2011 - 01/11/2013

Partners: Muenster University of Applied Sciences, Vector Fabrics, Centric TSolve, University Twente, Medische Spectrum Twente, TU Braunschweig

Project title: HPC-Europa2: Pan-European research infrastructure on high performance computing for 21st century science

Reference ID: EU-FP7-INFRA grant #228398

Funded by: European Commission

Budget: 13.061.754,00 €

Coordinator: Garofalo, Francesca

Duration: 01/02/2012 - 02/05/2012

Partners: CINECA, EPCC, BSC, HLRS, GENCI, SARA, PSNC, UNIFOB, TCD, CSC, ICCS-NTUA

Project title: Activity and Context Recognition with Opportunistic Sensors Configurations (OPPORTUNITY)

Reference ID: EU-FP7-FET-Open grant #225938

Funded by: European Commission

Budget: 1.508.768,00 €

Coordinator: Roggen, Daniel

Duration: 2009 - 2012

Partners: Swiss Federal Institute of Technology, University of Passau, Johannes Kepler Universität Linz, École Polytechnique Fédérale de Lausanne

Participation in National R&D Projects

Project title: Advanced Computing Architectures and Machine Learning-Based Solutions for Complex Problems in Bioinformatics, Biotechnology and Biomedicine

Reference ID: RTI2018-101674-B-I00

Funded by: Spanish Ministry of Economy and Competitiveness

Budget: 135.000,00 €

Coordinator: Rojas, Ignacio & Herrera, Luis Javier

Duration: 01/01/2019 - 31/12/2021

Partners: University of Granada

Project title: Advances in High Performance Computing for Machine Learning based on Heterogeneous Data Sources. Applications in Healthcare and Wellbeing

Reference ID: TIN2015-71873-R

Funded by: Spanish Ministry of Science and Education *Budget:* 117.491,00 €
Coordinator: Rojas, Ignacio & Herrera, Luis Javier *Duration:* 01/01/2016 - 30/09/2019
Partners: University of Granada

Project title: ehp-MOBE: Energy-aware High Performance Multi-objective Optimization in Heterogeneous Computer Architectures. Applications in Biomedical Engineering *Reference ID:* TIN2015-67020-P
Funded by: Spanish Ministry of Science and Education *Budget:* 98.864,00 €
Coordinator: Ortega, Julio *Duration:* 01/01/2016 - 01/01/2019
Partners: University of Granada

Project title: Symbionics: creating Co-Adaptive Assistive Devices *Reference ID:* P12-03
Funded by: Applied and Engineering Sciences (TTW) division of the Netherlands Organisation for Scientific Research (NWO) *Budget:* 3.980.000,00 €
Coordinator: Koopman, Bart *Duration:* 01/01/2016 - 01/03/2018
Partners: University of Twente, TU Delft, VU University, Radboud University Nijmegen Medical Centre, University Medical Centre Groningen, Maastricht University Medical Centre

Project title: ADAPT *Reference ID:* 13535
Funded by: Applied and Engineering Sciences (TTW) division of the Netherlands Organisation for Scientific Research (NWO) *Budget:* 750.000,00 €
Coordinator: Meijer, Kenneth *Duration:* 01/01/2016 - 01/03/2018
Partners: Maastricht University Medical Centre, University of Twente, VU University, Rijksuniversiteit Groningen

Project title: Development of advanced intelligent systems in high performance platforms. Application to bioinformatics and biomedical problems (DSIPA-BIO) *Reference ID:* SAF2010-20558
Funded by: Spanish Ministry of Science and Innovation *Budget:* 181.500,00 €
Coordinator: Rojas, Ignacio *Duration:* 01/01/2011 - 01/07/2014
Partners: University of Granada

Project title: High performance computing in bioinformatics and biomedicine by using intelligent systems (HPC-BIO)
Reference ID: P09-TIC-175476
Funded by: Dept. of Innovation, Science and Commerce, Regional Government of Andalusia (Spain) *Budget:* 194.360,68 €
Coordinator: Rojas, Ignacio *Duration:* 01/06/2010 - 01/03/2013
Partners: University of Granada

Project title: Novel smart architectures for modeling of complex systems: application to eHealth problems.
Reference ID: PP2012-PI11 *Budget:* 3.000,00 €
Funded by: University of Granada *Duration:* 01/03/2013 - 01/03/2014
Coordinator: Pomares, Hector
Partners: University of Granada

Project title: Advanced computing for dynamic, adaptive and self-organizing control of complex systems. Application to industrial and biomedical problems (ADA-BIO) *Reference ID:* P07-TIC-02768
Funded by: Dept. of Innovation, Science and Commerce, Regional Government of Andalusia (Spain) *Budget:* 199.157,00 €
Coordinator: Rojas, Ignacio *Duration:* 2008 - 2011
Partners: University of Granada

Participation in National R&D Contracts

Project title: A Healthy Mind in a Healthy Body *Reference ID:* PIHC2017 RVVZ Z118
Funded by: Menzis Health Insurance *Budget:* 50.000,00 €
Coordinator: van Det, Marc *Duration:* 01/04/2018 - 01/07/2019
Partners: Ziekenhuisgroep Twente, University of Twente

Project title: Cloud RTU Engineering Tool (CRET) *Reference ID:* C-4287-00
Funded by: FG-UGR-Empresa *Budget:* 30.000,00 €
Coordinator: Damas, Miguel *Duration:* 01/07/2016 - 01/04/2017

Partners: Telvent Energía, S.A. (Schneider Electric)

Project title: Digital and Personal Environment for Health and Welfare (AmiVital)

Reference ID: CENIT2007-1010 (TID) OTRI2491; CENIT2007-1010 (TID) OTRI2553

Funded by: Centre for the Development of Industrial Technology (CDTI) and Interministerial Science and Technology Research Commission (CICYT)

Budget: 24.000.000,00 €

Coordinator: Prieto, Alberto

Duration: 2007 - 2010

Partners: Siemens, Telefónica I+D, Telvent Interactiva, Ericsson España, Eptron, CPI, Acerca Comunicaciones, Airzone e IS2, ITACA (Grupo TSB), Fundación CARTIF, Fundación Rioja Salud, Hospital Universitario Puerta de Hierro, Instituto de Salud Carlos III, Universidad de Granada (Dpto. ATC), Universidad de Málaga (Grupo ISIS), Universidad Politécnica de Madrid (Grupos LST, GBT, CEDITEC y DIT) and Universidad de Zaragoza (Grupo Tecnodiscap)

Scientific Publications

----- Journals (SCI-E) -----

Felix, I.-R., Castro, L.-A., Rodriguez, L.-F., Banos, O. Mobile sensing for behavioral research: A component-based approach for rapid deployment of sensing campaigns. *International Journal of Distributed Sensor Networks*, vol. 15, no. 9, pp. 1-17 (2019) {IF=1.614, Q3}

Bailon, C., Damas, M., Pomares, H., Sanabria, D., Perakakis, P., Goicoechea, C., Banos, O. Smartphone-Based Platform for Affect Monitoring through Flexibly Managed Experience Sampling Methods. *Sensors*, vol. 19, no. 3430, pp. 1-23 (2019) {IF=3.031, Q1}

Wohlfahrt-Laymann, J., Hermens, H., Villalonga, C., Vollenbroek-Hutten, M., Banos, O. MobileCogniTracker - A mobile experience sampling tool for tracking cognitive behaviour. *Journal of Ambient Intelligence and Humanized Computing*, vol. 10, no. 6, pp. 2143-2160 (2019) {IF=1.910, Q3}

Bailon, C., Damas, M., Pomares, H., Banos, O. SPIRA: an automatic system to support lower limb injury assessment. *Journal of Ambient Intelligence and Humanized Computing*, vol. 10, no. 6, pp. 2111-2123 (2019) {IF=1.910, Q3}

Banos, O., Hervas, R. Ubiquitous computing for health applications. *Journal of Ambient Intelligence and Humanized Computing*, vol. 10, no. 6, pp. 2091-2093 (2019) {IF=1.910, Q3}

Bang, J., Hur, T., Kim, D., Huynh-The, T., Lee, J., Han, Y., Banos, O., Kim, J.-I., Lee, S. Adaptive Data Boosting Technique for Robust Personalized Speech Emotion in Emotionally-Imbalanced Small-Sample Environments. *Sensors*, vol. 18, no. 11, pp. 1-21 (2018) {IF=3.031, Q1}

Banos, O., Nugent, C. M-Coaching: Towards the Next Generation of Mobile-Driven Healthcare Support Services. *Computer*, vol. 51, no. 8, pp. 14-17 (2018) {IF=3.564, Q1}

Banos, O., Hermens, H., Nugent, C., Pomares, H. Smart Sensing Technologies for Personalised e-Coaching. *Sensors*, vol. 18, no. 1751, pp. 1-4 (2018) {IF=3.031, Q1}

Banos, O., Nugent, C. E-Coaching for Health. *Computer*, vol. 51, no. 3, pp. 12-15 (2018) {IF=3.564, Q1}

Hussain, J., Ul-Hassan, A., Muhammad-Bilal, H.-S., Ali, R., Afzal, M., Hussain, S., Bang, J., Banos, O., Lee, S. Model-Based Adaptive User Interface based on Context and User Experience Evaluation. *Journal on Multimodal User Interfaces*, vol. 12, no. 1, pp. 1-16 (2018) {IF=2.020, Q2}

Siddiqi, M. H., Ali, M., Abdelrahman Eldib, M. E., Khan, A., Banos, O., Khan, A. M., Lee, S., Choo, H. Evaluating Real-life Performance of the State-of-the-art in Facial Expression Recognition using a Novel YouTube-based Datasets. *Multimedia Tools and Applications*, vol. 77, no. 1, pp. 917-937 (2018) {IF=2.101, Q2}

Hur, T., Bang, J., Kim, D., Banos, O., Lee, S. Smartphone Location-Independent Physical Activity Recognition based on Transportation Natural Vibration Analysis. *Sensors*, vol. 17, no. 4, pp. 1-21 (2017) {IF=2.475, Q2}

Villalonga, C., Pomares, H., Rojas, I., Banos, O. MIMU-Wear: Ontology-based Sensor Selection for Real-World Wearable Activity Recognition. *Neurocomputing*, vol. 250, pp. 76-100 (2017) {IF=3.241, Q1}

Huynh-The, T., Banos, O., Sungyoung, L., Byeong Ho, K., Eun, S., Le-Tien, T. NIC: A Robust Background Extraction Algorithm for Foreground Detection in Dynamic Scenes. *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 27, no. 7, pp. 1478-1490 (2017) {IF=3.558, Q1}

- Villalonga, C., Razzaq, M.-A., Ali Khan, W., Pomares, H., Rojas, I., Lee, S., Banos, O. Ontology-based High-Level Context Inference for Human Behavior Identification. *Sensors*, vol. 16, no. 10, pp. 1-19 (2016) {IF: 2.677, Q1}
- Banos, O., Villalonga, C., Bang, J. H., Hur, T. H., Kang, D., Park, S.-B., Hyunh-The, T., Vui, L. B., Amin, M.-B., Razzaq, M.-A., Ali Khan, W., Hong, C.-S., Lee, S. Human Behavior Analysis by means of Multimodal Context Mining. *Sensors*, vol. 16, no. 8, pp. 1-19 (2016) {IF=2.677, Q1}
- Bilal Amin, M., Banos, O., Ali Khan, W., Rizvi, B. A., Gong, J., Mao, B., Cho, S. H., Hussain, S., Ali, T., Aktar, U., Chung, T. C., Lee, S. On curating multimodal sensory data for personalized health and wellness platforms. *Sensors*, vol. 16, no. 7, pp. 1-27 (2016) {IF=2.677, Q1}
- Huynh-The, T., Banos, O., Sungyoung, L., Yoon, Y., Le-Tien, T. Improving Digital Image Watermarking by Means of Optimal Channel Selection. *Expert Systems with Applications*, vol. 62, pp. 177-189 (2016) {IF=3.928, Q1}
- Banos, O., Bilal Amin, M., Ali Khan, W., Afzal, M., Hussain, M., Kang, B. H., Lee, S. The Mining Minds Digital Health and Wellness Framework. *BioMedical Engineering OnLine*, vol. 15, no. 1, pp. 165-186 (2016) {IF=1.683, Q3}
- Bilal Amin, M., Ali Khan, W., Hussain, S., Bui, D. M., Banos, O., Kang, B. H., Lee, S. Evaluating Large-scale Biomedical Ontology Matching Over Multicore Platforms. *IETE Technical Review*, vol. 33, no. 4, pp. 415-427 (2016) {IF=1.330, Q3}
- Banos, O., Villalonga, C., Garcia, R., Saez, A., Damas, M., Holgado, J. A., Lee, S., Pomares, H., Rojas, I. Design, implementation and validation of a novel open framework for agile development of mobile health applications. *BioMedical Engineering OnLine*, vol. 14, S2-S6, pp. 1-20 (2015) {IF=1.382, Q3}
- Huynh-The, T., Banos, O., Le, B. V., Bui, D. M., Yoon, Y., Lee, S. Traffic Behavior Recognition Using the Pachinko Allocation Model. *Sensors*, vol. 15, no. 6, pp. 16040-16059 (2015) {IF=2.033, Q1}
- Banos, O., Moral-Munoz, J.A., Diaz-Reyes, I., Arroyo-Morales, M., Damas, M., Herrera-Viedma, E., Hong, C.S., Lee, S., Pomares, H., Rojas, I., Villalonga, C. mDurance: a Novel Mobile Health System to Support Trunk Endurance Assessment. *Sensors*, vol. 15, pp. 13159-13183 (2015) {IF=2.033, Q1}
- Banos, O., Damas, M., Guillen, A., Herrera, L.J., Pomares, H., Rojas, I., Villalonga, C. Multi-sensor fusion based on asymmetric decision weighting for robust activity recognition. *Neural Processing Letters*, vol. 42, no. 1, pp. 5-26 (2015) {IF=1.747, Q2}
- Banos, O., Villalonga, C., Damas, M., Glösekötter, P., Pomares, H., Rojas, I. PhysioDroid: combining wearable health sensors and smartphones for a pervasive, continuous and personal monitoring. *The Scientific World Journal*, vol. 2014, no. 490824, pp. 1-11 (2014) {IF=1.219, Q2}
- Banos, O., Toth M. A., Damas, M., Pomares, H., Rojas, I. Dealing with the effects of sensor displacement in wearable activity recognition. *Sensors*, vol. 14, no. 6, pp. 9995-10023 (2014) {IF=2.245, Q1}
- Banos, O., Galvez, J. M., Damas, M., Pomares, H., Rojas, I. Window size impact in activity recognition. *Sensors*, vol. 14, no. 4, pp. 6474-6499 (2014) {IF=2.245, Q1}
- Banos, O., Damas, M., Pomares, H., Rojas, F., Delgado-Marquez, B., Valenzuela, O. Human activity recognition based on a sensor weighting hierarchical classifier. *Soft Computing*, vol. 17, pp. 333-343 (2013) {IF=1.304, Q2}
- Banos, O., Damas, M., Pomares, H., Rojas, I. On the Use of Sensor Fusion to Reduce the Impact of Rotational and Additive Noise in Human Activity Recognition. *Sensors*, vol. 12, no. 6, pp. 8039-8054 (2012) {IF=1.953, Q1}
- Banos, O., Damas, M., Pomares, H., Prieto, A., Rojas, I. Daily Living Activity Recognition based on Statistical Feature Quality Group Selection. *Expert Systems with Applications*, vol. 39, no. 9, pp. 8013-8021 (2012) {IF=1.854, Q1}

----- Non-SCI International journals -----

Banos, O., Bilal Amin, M., Ali Khan, W., Afzel, M., Ali, T., Kang, B. H., Lee, S. Mining Minds: an innovative framework for personalized health and wellness support. *EAI Endorsed Transactions on Pervasive Health and Technology*, vol. 15, no. 2, pp. 1-8 (2015)

Banos, O., Ali Khan, W., Bilal Amin, M., Hur, T. H., Bang, J. H., Kang, D. U., Hussain, M., Afzel, M., Ali, T., Lee, S. Mining Minds Healthcare Framework based on Big Data. *The Journal of The Korean Institute of Communication Sciences*, vol. 32, no. 11, pp. 12-20 (2015)

----- Books -----

Bravo, J., Banos, O. Proceedings of the 12th International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018). Proceedings, Volume 2, MDPI 2018

Banos, O. Robust Expert Systems for more Flexible Real-World Activity Recognition. Ph.D. Thesis, University of Granada (2014) ISBN: 978-84-9083-078-9

----- Book chapters -----

Banos, O., Toth M. A., Damas, M., Pomares, H., Rojas, I. Amft, O. Evaluation of inertial sensor displacement effects in activity recognition systems. *Science and Supercomputing in Europe (Information & Communication Technologies), HPC-Europe 2* (2013)

Damas, M., Ortega, J., Pomares, H., Banos, O. Parallel Hybrid Method Applied to Water Distribution Networks scheduling. *Science and Supercomputing in Europe (Information & Communication Technologies), HPC-Europe 2* (2010) ISBN: 978-88-86037-24-2

----- International Conferences -----

Konsolakis, K., Hermens, H., Banos, O. A Novel Framework for the Holistic Monitoring and Analysis of Human Behaviour. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2019), Toledo, Spain, December 2-5, (2019)

Banos, O., Galvez, J. M., Damas, M., Guillen, A., Herrera, L. J., Pomares, H., Rojas, I., Villalonga, C. Improving wearable activity recognition via fusion of multiple equally-sized data subwindows. International Work-Conference on Artificial Neural Networks (IWANN 2019), Gran Canaria, Spain, June 12-14, (2019)

Konsolakis, K., Hermens, H., Villalonga, C., Vollenbroek-Hutten, M., Banos, O. Human Behaviour Analysis Through Smartphones. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018), Punta Cana, Dominican Republic, December 4-7, (2018)

Nijeweme-d'Hollosy, W. O., Notenboom, T., Banos, O. A study on the perceptions of autistic adolescents towards mainstream emotion recognition technologies. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018), Punta Cana, Dominican Republic, December 4-7, (2018)

Bailon, C., Damas, M., Pomares, H., Sanabria, D., Perakakis, P., Goicoechea, C., Banos, O. Intelligent Monitoring of Affective Factors Underlying Sport Performance by means of Wearable and Mobile Technology. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018), Punta Cana, Dominican Republic, December 4-7, (2018)

Moreno, S., Damas, M., Rojas, I., Amezcua, V., Gutierrez-Pastor, P., Banos, O. Ubiquitous Assessment of the Recovery of Cancer Patients Using Consumer-Level Activity Trackers. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018), Punta Cana, Dominican Republic, December 4-7, (2018).

Ramos-Monteon, J., Castro, L., Rodriguez, L. F., Banos, O. InCense IoT: A Collective Sensing System for Behavior Data in Shared Spaces. International Conference on Ubiquitous Computing and Ambient Intelligence (UCAml 2018), Punta Cana, Dominican Republic, December 4-7, (2018)

Carrillo-Perez, F., Diaz-Reyes, I., Damas, M., Banos, O., Soto-Hermoso, V. M., Molina-Molina, A. A Novel Automated Algorithm for Computing Lumbar Flexion Test Ratios Enhancing Athletes Objective Assessment of Low Back Pain. International Congress on Sport Sciences Research and Technology Support (icSPORTS 2018), Seville, Spain, September 20-21, (2018)

Recher, F., Banos, O., Corien, D. M., Schaake, L., Baten, C., Buurke, J. Optimizing activity recognition in stroke survivors for wearable exoskeletons. *IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob 2018)*, Enschede, Netherlands, August 26-29, (2018)

op den Akker, H., op den Akker, R., Beinema, T., Banos, O., Heylen, D., Bedsted, B., Pease, A., Pelachaud, C., Traver-Salcedo, V., Kyriazakos, S., Hermens, H. Council of Coaches - A Novel Holistic Behavior Change Coaching Approach. *ICT for Ageing Well (ICT4AWE 2018)*, Funchal, Portugal, March 22-23, (2018)

Wohlfahrt-Laymann, J., Hermens, H., Villalonga, C., Vollenbroek-Hutten, M., Banos, O. Enabling remote assessment of cognitive behaviour through mobile experience sampling. *EmotionAware*, within IEEE International Conference on Pervasive Computing and Communications (*Percom 2018*), Athens, Greece, March 19-23, (2018)

Villalonga, C., Op den Akker, H., Hermens, H., Herrera, L.J., Pomares, H., Rojas, I., Valenzuela, O., Banos, O. Automatic mapping of motivational text messages into ontological entities for smart coaching applications. *International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmI 2017)*, Philadelphia, USA, November 7-10, (2017)

Diaz-Reyes, I., Damas, M., Moral-Munoz, J.A., Banos, O. A Classification System to Assess Low Back Muscle Endurance and Activity Using mHealth Technologies. *International Work-Conference on Artificial Neural Networks (IWANN 2017)*, Cadiz, Spain, June 14-16, (2017)

Bailon, C., Damas, M., Pomares, H., Banos, O. Automatic 2D Motion Capture System for Joint Angle Measurement. *International Work-Conference on Artificial Neural Networks (IWANN 2017)*, Cadiz, Spain, June 14-16, (2017)

Villalonga, C., Op den Akker, H., Hermens, H., Herrera, L.J., Pomares, H., Rojas, I., Valenzuela, O., Banos, O. Ontological Modeling of Motivational Messages for Physical Activity Coaching. *Health-i-Coach*, within the International Conference on Pervasive Computing Technologies for Healthcare (*PervasiveHealth 2017*), Barcelona, Spain, May 23-26, (2017)

Ollero, J., Moral-Munoz J.-A., Rojas, I., Banos, O. Mobile Health System for Evaluation of Breast Cancer Patients During Treatment and Recovery Phases. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2017)*, Granada, Spain, April 26-28, (2017)

Moreno, S., Damas, M., Pomares, H., Moral-Munoz J.-A., Banos, O. First Approach to Automatic Performance Status Evaluation and Physical Activity Recognition in Cancer Patients. *International Conference on Ubiquitous Computing and Communications (IUCC 2016)*, Granada, Spain, December 14-16, (2016)

Villalonga, C., Pomares, H., Banos, O. Analysis of the Innovation Outputs in mHealth for Patient Monitoring. *International Conference on Ubiquitous Computing and Communications (IUCC 2016)*, Granada, Spain, December 14-16, (2016)

Bailon, C., Damas, M., Pomares, H., Banos, O. First Approach to Automatic Measurement of Frontal Plane Projection Angle During Single Leg Landing Based on Depth Video. *International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmI 2016)*, Las Palmas, Spain, November 29-December 2, (2016)

Bang, J. H., Kang, D. U., Hur, T. H., Hyunh-The, T., Razaq, M., Ali Khan, W., Banos, O., Lee, S. IoT based Human Centric Context Awareness Framework for Healthcare and Wellness Platform. *International Symposium on Perception, Action and Cognitive Systems (PACS2016)*, Seoul, South Korea, October 27-28, (2016)

Siddiqi, M. H., Ali, M., Idris, M., Banos, O., Lee, S., Choo, H., A Novel Dataset for Real-life Evaluation of Facial Expression Recognition Methodologies. *Canadian Conference on Artificial Intelligence (CCAI 2016)*, Victoria, Canada, May 31-June 3, (2016)

Nugent, C., Cleland, I., Santanna, A., Synnott, J., Espinilla, M., Banos, O., Lundstrom, J., Hallberg, J., Calzada, A. An initiative for the creation of open datasets within pervasive healthcare. *International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2016)*, Cancun, Mexico, May 16-19, (2016)

Guillen, A., Herrera, L. J., Banos, O., Garcia-Saura, P. L., Munoz, A., Guillen, J. F. A new approach to improve coping strategies to surgery in children. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2016)*, Granada, Spain, April 20-22, (2016)

Villalonga, C., Banos, O., Pomares, H., Rojas, I., Lee, S. High-Level Context Architecture for Real Time Identification of Human Behavior. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2016)*, Granada, Spain, April 20-22, (2016)

Moreno, S., Damas, M., Pomares, H., Moral-Munoz, J. A., Banos, O. A Gamified System to Support Cancer Patients Recovery. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2016)*, Granada, Spain, April 20-22, (2016)

Banos, O., Villalonga, C., Bang, J. H., Hur, T. H., Kang, D. W., Park, S. B., Hyunh-The, T., Vui, L. B., Lee, S. Inferring Human Behavior by means of Multimodal Context Mining. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2016)*, Granada, Spain, April 20-22, (2016)

Banos, O., Damas, M., Guillen, A., Herrera, L. J., Pomares, H., Rojas, I., Villalonga, C., Lee, S. On the Development of A Real-Time Multi-Sensor Behavior Recognition System. *International Work-conference on Ambient Assisted Living an Active Ageing (IWAAL 2015)*, Patagonia, Chile, December 1-4, (2015)

Villalonga, C., Banos, O., Ali Khan, W., Ali, T., Razzaq, M. A., Lee, S., Pomares, H., Rojas, I. High-Level Context Inference for Human Behavior Identification. *International Work-conference on Ambient Assisted Living an Active Ageing (IWAAL 2015)*, Patagonia, Chile, December 1-4, (2015)

Ali, W. K., Amin, M. B., Banos, O., Ali, T., Hussain, M., Afzal, M., Hussain, S., Hussain, J., Ali, R., Ali, M., Kang, D. U., Bang, J. H., Hur, T. H., Ali, B., Idris, M., Razzaq, A., Lee, S., Kang, B. H. Mining Minds: Journey of Evolutionary Platform for Ubiquitous Wellness. *International Conference on Ubiquitous Healthcare (u-Healthcare 2015)*, Osaka, Japan, Nov 30-Dec 2, (2015)

Wansing, C., Banos, O., Gloesekoetter, P., Pomares, H., Rojas, I. Development of a platform for the exchange of biodatasets with integrated opportunities for artificial intelligence using MatLab. *World Conference on Complex Systems (WCCS 2015)*, Marrakech, Morocco, November 23-25, (2015)

Huynh-The, T., Banos, O., Le, B.-V., Bui, D.-M., Lee, S., Yoon, Y., Le-Tien, T. PAM-Based Flexible Generative Topic Model for 3D Interactive Activity Recognition. *International Conference on Advanced Technologies for Communications (ATC 2015)*, Hochiminh, Vietnam, October 14-16, (2015)

Huynh-The, T., Banos, O., Le, B.-V., Bui, D.-M., Lee, S., Yoon, Y., Le-Tien, T. Background Subtraction With Neighbor-based Intensity Correction Algorithm. *International Conference on Advanced Technologies for Communications (ATC 2015)*, Hochiminh, Vietnam, October 14-16, (2015)

Banos, O., Moral-Munoz, J.A., Diaz-Reyes, I., Arroyo-Morales, M., Pomares, H., Rojas, I., Villalonga, C., Bang, J.H., Kang, D.U., Hong, C. S., Lee, S. Facilitating Trunk Endurance Assessment by means of Mobile Health Technologies. *ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2015)*, Osaka, Japan, September 7-11, (2015)

Banos, O., Bang, J. H., Hur, T. H., Siddiqui, M., Hyunh-The, T., Vui, L. B., Ali Khan, W., Ali, T., Villalonga, C., Lee, S. Mining Human Behavior for Health Promotion. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2015)*, Milano, Italy, August 25-29, (2015)

Banos, O., Hong, C. S., Lee, S. A novel feature selection technique for improving wearable activity recognition. *Korea Computer Conference (KCC 2015)*, Jeju, South Korea, June 24-26, (2015)

Banos, O., Galvez, J. M., Damas, M., Guillen, A., Herrera, L. J., Pomares, H., Rojas, I., Villalonga, C., Hong, C. S., Lee, S. Multiwindow Fusion for Wearable Activity Recognition. *International Work Conference on Neural Networks (IWANN 2015)*, Palma de Mallorca, Spain, June 10-12, (2015)

Villalonga, C., Banos, O., Pomares, H., Rojas, I. Ontological Sensor Selection for Wearable Activity Recognition. *International Work Conference on Neural Networks (IWANN 2015)*, Palma de Mallorca, Spain, June 10-12, (2015)

Guillen, A., Liebana, F., Herrera, L. J., Banos, O., Rojas, I. Performing variable selection by multiobjective criterion: an application to mobile payment. *International Work Conference on Neural Networks (IWANN 2015)*, Palma de Mallorca, Spain, June 10-12, (2015)

Herrera, L. J., Guillen, A., Martinez, R., Garcia, C., Pomares, H., Banos, O., Rojas, I. Modeling the EUR/USD index using LS-SVM and performing variable selection. *International Work Conference on Neural Networks (IWANN 2015)*, Palma de Mallorca, Spain, June 10-12, (2015)

Hussain, J., Ali, M., Bilal, M., Ahmad, H. F., Banos, O., Sungyoung, L. SNS based predictive model for depression assessment. *International Conference on Smart homes and Health Telematics (ICOST 2015)*, Geneva, Switzerland, June 10-12, (2015)

Banos, O., Bilal Amin, M., Ali Khan, W., Afzel, M., Ali, T., Kang, B. H., Lee, S. Mining Minds: an innovative framework for personalized health and wellness support. *International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2015)*, Istanbul, Turkey, May 20-23, (2015)

Banos, O., Bilal Amin, M., Ali Khan, W., Afzel, M., Ahmad, M., Ali, M., Ali, T., Ali, R., Bilal, M., Han, M., Hussain, J., Hussain, M., Hussain, S., Hur, T. H., Bang, J. H., Huynh-The, T., Idris, M., Kang, D. W., Park, S. B., Siddiqui, M., Vui, L. B., Fahim, M., Khattak, A. M., Kang, B. H., Lee, S. An Innovative Platform for Person-Centric Health and Wellness Support. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015)*, Granada, Spain, April 15-17, (2015)

Villalonga, C., Banos, O., Pomares, H., Rojas, I. An Ontology for Dynamic Sensor Selection in Wearable Activity Recognition. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2015)*, Granada, Spain, April 15-17, (2015)

Hyunh-The, T., Banos, O., Lee, S., Yoon, Y., Le-Tien, T. A Novel Watermarking Scheme for Image Authentication in Social Networks. *International Conference on Ubiquitous Information Management and Communication (IMCOM 2015)*, Bali, Indonesia, January 8-10, (2015)

Banos, O., Garcia, R., Holgado, J. A., Damas, M., Pomares, H., Rojas, I., Saez, A., Villalonga, C. mHealthDroid: a novel framework for agile development of mobile health applications. *International Work-conference on Ambient Assisted Living an Active Ageing (IWAAL 2014)*, Belfast, Northern Ireland, December 2-5, (2014)

Banos, O., Galvez, J. M., Damas, M., Pomares, H., Rojas, I. Evaluating the effects of signal segmentation on activity recognition. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2014)*, Granada, Spain, April 7-9, (2014)

Banos, O., Damas, M., Pomares, H., Rojas, I. Handling displacement effects in on-body sensor-based activity recognition. *International Work-conference on Ambient Assisted Living an Active Ageing (IWAAL 2013)*, San José, Costa Rica, December 2-6, (2013)

Herrera L. J., Rojas, I., Pomares, H., Guillen A., Valenzuela, O., Banos, O. Classification of MRI images for Alzheimer's disease detection. *International Conference on Biomedical Computing (BioMedCom 2013)*, Washington D.C., USA, September 8-14, (2013)

Valenzuela, O., Rojas, F., Herrera, L. J., Ortuno, F., Banos, O., Ruiz, G., Tribak, H., Pomares, H., Rojas, I. Intelligent systems to autonomously classify several arrhythmia using information from ECG. *International Conference on Biomedical Computing (BioMedCom 2013)*, Washington D.C., USA, September 8-14, (2013)

Banos, O., Damas, M., Pomares, H., Rojas, I. Activity recognition based on a multi-sensor meta-classifier. In: *International Work-Conference on Neural Networks (IWANN 2013)*, Tenerife, Spain, June 12-14, (2013)

Banos, O., Damas, M., Glösekötter, P., Hermes, A., Mende, H., Pomares, H., Rojas, I. PhysioDroid: an app for physiological data monitoring. *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2013)*, Granada, Spain, March 18-20, (2013)

Banos, O., Toth, M. A., Damas, M., Pomares, H., Rojas, I., Amft, O. A benchmark dataset to evaluate sensor displacement in activity recognition. *International Conference on Ubiquitous Computing (UbiComp 2012)*, Pittsburgh, USA, September 5-8, (2012)

Banos, O., Calatroni, A., Damas, M., Pomares, H., Rojas, I., Troester, G., Sagha, H., Millan, J. del R., Chavarriaga, R., Roggen, D. Kinect=IMU? Learning MIMO Signal Mappings to Automatically Translate Activity Recognition Systems Across Sensor Modalities. *Annual International Symposium on Wearable Computers (ISWC 2012)*, Newcastle, United Kingdom, June 18-22 (2012)

Banos, O., Damas, M., Pomares, H., Rojas, I. Human multisource activity recognition for AAL problems. *International Symposium on Ubiquitous Computing and Ambient Intelligence (UCAml 2011)*, Riviera Maya, México, December 5-9, (2011)

Banos, O., Damas, M., Pomares, H., Rojas, I., Prieto, B. Application of a novel feature selector for human activity recognition based on inertial monitored data. *International Conference on Artificial Intelligence (ICAI 2011)*, Las Vegas, Nevada, USA, July 18-21, (2011)

Banos, O., Damas, M., Pomares, H., Rojas, I. Recognition of Human Physical Activity based on a novel Hierarchical Weighted Classification scheme. *International Joint Conference on Neural Networks (IJCNN 2011)*, San José, California, USA, July 31- August 5, (2011)

Banos, O., Damas, M., Pomares, H., Rojas, I. Automatic Recognition of Daily Living Activities based on a Hierarchical Classifier. *International Work Conference on Neural Networks (IWANN 2011)*, Torremolinos, Spain, June 8-10, (2011)

Banos, O., Pomares, H., Rojas, I. Ambient Living Activity Recognition based on Feature-set Ranking Using Intelligent Systems. *International Joint Conference on Neural Networks (IJCNN 2010)*, Barcelona, Spain, July 18-23, (2010)

Banos, O., Pomares, H., Rojas, I. Novel Method for Feature-set Ranking Applied to Physical Activity Recognition. *International Conference on Industrial Engineering and Other Applications of Applied Intelligent Systems (IEA/AIE 2010)*, Cordoba, Spain, June 1-4, (2010)

TEACHING

Teaching Accreditation

Institution: National Agency for Quality Assessment and Accreditation of Spain (ANECA)

Accreditation: Tenured Professor *Awarded:* 2019

Institution: National Agency for Quality Assessment and Accreditation of Spain (ANECA)

Accreditation: Associate Professor *Awarded:* 2014

Institution: TCP Language Centre of the University of Twente

Accreditation: English Proficiency Level C2 *Awarded:* 2018

Teaching Experience

Subject: Internet of Things (1 ECTS)

Institution: Faculty of Information Technology and Telecommunications Engineering (University of Granada)

Degree: MSc Data Science and Computer Engineering *Courses:* 2018/2019

Role: Instructor

Subject: Technology Teaching and Learning (3+2 ECTS)

Institution: Faculty of Information Technology and Telecommunications Engineering (University of Granada)

Degree: Computer Engineering *Courses:* 2018/2019

Role: Instructor

Subject: Data Centers (1 ECTS)

Institution: Faculty of Information Technology and Telecommunications Engineering (University of Granada)

Degree: Computer Engineering *Courses:* 2018/2019

Role: Instructor

Subject: Servers Engineering (9 ECTS)

Institution: Faculty of Information Technology and Telecommunications Engineering (University of Granada)

Degree: Computer Engineering *Courses:* 2018/2019

Role: Instructor

Subject: Industrial Communications and Computing (2.2 ECTS)

Institution: Faculty of Sciences (University of Granada)

Degree: BSc Industrial Electrical Engineering *Courses:* 2017/2018, 2018/2019

Role: Instructor

Subject: Systems Engineering (2.2 ECTS)

Institution: Faculty of Sciences (University of Granada)

Degree: BSc Industrial Electrical Engineering *Courses:* 2017/2018

Role: Instructor

Subject: Professional Development (4 + 2 ECTS)

Institution: Faculty of Electrical Engineering, Mathematics and Computer Science (University of Twente)

Degree: BSc Creative Technology *Courses:* 2016/2017, 2017/2018
Role: Instructor
Subject: Biosignals and Medical Electronics (2.5 ECTS)
Institution: Faculty of Electrical Engineering, Mathematics and Computer Science (University of Twente)
Degree: BSc Creative Technology *Courses:* 2015/2016, 2016/2017
Role: Instructor
Subject: Physical Systems and their Dynamic Behavior (2.5 ECTS)
Institution: Faculty of Electrical Engineering, Mathematics and Computer Science (University of Twente)
Degree: BSc Creative Technology *Courses:* 2015/2016, 2016/2017
Role: Instructor
Subject: Smart Technology (2.5 ECTS)
Institution: Faculty of Electrical Engineering, Mathematics and Computer Science (University of Twente)
Degree: BSc Creative Technology *Courses:* 2016/2017
Role: Guest lecturer
Subject: Parallel Computing (6 ECTS)
Institution: Faculty of Information Technology and Telecommunications Engineering (University of Granada)
Degree: MSc Computer Engineering *Courses:* 2013/2014, 2012/2013
Role: Instructor

(Co)supervised PhD Thesis

Title: Understanding the limitations of emotion recognition technologies for autistic people (*tentative*)
Author: Zhoë Comas (University of Granada, Spain) *Defense date:* TBA
Title: Diagnosing mental health diseases via IoT-enabled smart monitoring (*tentative*)
Author: Leonardo Gutierrez (University of Granada, Spain) *Defense date:* TBA
Title: Tracking the exacerbations of diabetes type 2 patients by means of mobile sensing (*tentative*)
Author: Ciro Rodriguez (University of Granada, Spain) *Defense date:* TBA
Title: Inferring Human Behaviour in a holistic approach through mobile devices
Author: Kostas Konsolakis (University of Twente, Netherlands) *Defense date:* TBA
Title: Smart ubiquitous systems to support the recovery of cancer patients
Author: Salvador Moreno (University of Granada, Spain) *Defense date:* TBA
Title: Intelligent monitoring and prediction of affective factors underlying sport performance by means of mobile and wearable technology
Author: Carlos Bailon (University of Granada, Spain) *Defense date:* TBA
Title: Analysis of perceptions and factual correlations in physical endurance and daily behavior
Author: Ignacio Díaz (University of Granada, Spain) *Defense date:* TBA
Title: Ontology engineering and reasoning to support real world behavior recognition
Author: Claudia Villalonga (University of Granada, Spain) *Defense date:* December 2016
Grade: 10.0 (Cum Laude)

(Co)supervised MSc Thesis

Title: Augmented reality as a tool to improve spatial vision in high school students
Author: Antonio Jose Moreno (University of Granada, Spain) *Defense date:* June 2019
Grade: 9.0 (A)
Title: Using social media to increase the involvement of families in education
Author: Joaquin Cazalilla (University of Granada, Spain) *Defense date:* June 2019
Grade: 9.0 (A)
Title: Preliminary study on the use of virtual assistants to aid teachers with lessons' time management
Author: Blas Rascon (University of Granada, Spain) *Defense date:* June 2019
Grade: 8.8 (B)
Title: Digital response systems - challenges and perceptions towards its use in high school

Author: Francisco Alberto Pinteno (University of Granada, Spain) *Defense date:* June 2019
Grade: 8.9 (B)
Title: Investigating technical aspects, usability aspects, and participatory willingness for an effective mobile data sensing study

Author: Monique Te Rietstap (University of Twente, Netherlands) *Defense date:* January 2018
Grade: 8.0 (B)
Title: Development of an intelligent system to predict lower limb biomechanical injuries

Author: Carlos Bailon (University of Granada, Spain) *Defense date:* July 2017
Grade: 10.0 (A)
Title: Algorithm for the automatic analysis of the QT complex based on 4x3-lead ECGs

Author: Judith Elshof (University of Twente, Netherlands) *Defense date:* November 2016
Grade: 8.0 (B)
Title: Development of an intelligent mHealth system to predict trunk endurance and muscle fatigue

Author: Ignacio Díaz (University of Granada, Spain) *Defense date:* September 2016
Grade: 10.0 (A)
Title: Mobile health system for evaluation of breast cancer patients during treatment and recovery phases

Author: Joaquin Ollero (University of Granada, Spain) *Defense date:* September 2016
Grade: 9.5 (A)
Title: Development of a platform for the exchange of datasets with integrated opportunities for artificial intelligence using MatLab

Author: Christian Wansing (University of Applied Sciences Münster, Germany) *Defense date:* July 2015
Grade: 10.0 (A)
Title: An innovative clinical support system for trunk endurance assessment

Author: Ignacio Díaz (University of Granada, Spain) *Defense date:* June 2015
Grade: 10.0 (A+)
Title: Automatic detection of on-body sensors location for opportunistic and robust inference of behavior

Author: Marta Gálvez (University of Granada, Spain) *Defense date:* February 2014
Grade: 9.5 (A)
Title: mHealthDroid: A toolkit for rapid development of mHealth applications

Author: Alejandro Sáez (University of Granada, Spain) *Defense date:* December 2013
Grade: 10.0 (A)
Title: Design, implementation and validation of a framework for agile development of mHealth applications

Author: Rafael García (University of Granada, Spain) *Defense date:* December 2013
Grade: 10.0 (A)
Title: Window size effect in activity recognition. Improving systems reliability through multi-segmented fusion

Author: Juan Manuel Gálvez (University of Granada, Spain) *Defense date:* September 2013
Grade: 10.0 (A)
Title: Android APP for biomedical monitoring

Author: Hendrik Mende (University of Applied Sciences Münster, Germany) *Defense date:* October 2012
Grade: 10.0 (A)
Title: Development of an Android application for the monitoring, storage and upload of biomedical data

Author: Andreas Hermes (University of Applied Sciences Münster, Germany) *Defense date:* October 2012
Grade: 10.0 (A)
Title: Signal preprocessing effects on daily living activity recognition systems

Author: Juan Manuel Gálvez (University of Granada, Spain) *Defense date:* September 2012
Grade: 9.0 (A)
Title: Sensmotion: APP for daily living activities monitoring

Author: Raúl Nadal (University of Granada, Spain) *Defense date:* September 2012
Grade: 9.5 (A)

Title: Human Activity Recognition based on an application for the Android operating system
Author: Jens Ostrowski (University of Applied Sciences Münster, Germany) *Defense date:* September 2011
Grade: 9.5 (A)

(Co)supervised BSc Thesis

Title: EMG wearable device for health applications
Author: Ignacio Arenas García (University of Granada, Spain) *Defense date:* June 2019
Grade: 9.0 (A)

Title: Simulation, automation and supervision of Industry 4.0 processes
Author: Miguel Molina Fernández (University of Granada, Spain) *Defense date:* June 2019
Grade: 10.0 (A+)

Title: mCoach: mobile coaching for health applications
Author: Jose Manuel Rodriguez (University of Granada, Spain) *Defense date:* September 2018
Grade: 7.0 (B)

Title: SmartMoments: Using Smart Devices to Tag and Cluster "Personal Moments" in Daily Life
Author: Sun Ok (University of Twente, Netherlands) *Defense date:* July 2018
Grade: 9.0 (A)

Title: Using mobile sensing to detect indicators of alcohol intoxication
Author: Boris Das (University of Twente, Netherlands) *Defense date:* July 2018
Grade: 7.0 (B)

Title: Improved reminder system to stimulate medication adherence of elderly at home as well as outdoors with the use of the Medido medicine dispenser
Author: Laura van der Neut (University of Twente, Netherlands) *Defense date:* July 2018
Grade: 9.0 (A)

Title: CogniDecline: tracking mobile interaction for cognitive assessment
Author: Jan Wohlfahrt-Laymann (University of Twente, Netherlands) *Defense date:* July 2017
Grade: 9.0 (A)

Title: Using technology to recognise emotions in autistic people
Author: Tamara Notenboom (University of Twente, Netherlands) *Defense date:* July 2017
Grade: 8.0 (B)

Title: Safe cycling for elderly: see
Author: Lukas Bos (University of Twente, Netherlands) *Defense date:* July 2017
Grade: 8.0 (B)

Title: Traceability of medical equipment through hospitals and retirement homes
Author: Dennis Rieffe (University of Twente, Netherlands) *Defense date:* February 2017
Grade: 8.0 (B)

Title: Incorporating a Crutch into Gait Rehabilitation Floor Data
Author: Ruben van der Berg (University of Twente, Netherlands) *Defense date:* July 2016
Grade: 7.0 (B)

Title: Automatic performance status evaluation and physical activity recognition in cancer patients for medical diagnosis assistance
Author: Salvador Moreno (University of Granada, Spain) *Defense date:* July 2016
Grade: 10.0 (A)

Title: Automatic estimation of knee alignment based on depth video
Author: Carlos Bailon (University of Granada, Spain) *Defense date:* July 2016
Grade: 10.0 (A+)

Participation in Academia Innovation Projects

Title: UGRASP - UGR AeroSpace Program
Funded by: University of Granada

Reference ID: 13-29
Duration: from: 2013 to: 2015

Title: New learning methods applied to industrial robotics
Funded by: University of Granada

Reference ID: 11-280
Duration: from: 2011 to: 2013

Academic Publications

----- Journals -----

Moreno, S., Damas, M., Pomares, H., Banos, O. Theremin DIY con Arduino UNO. *Enseñanza y Aprendizaje de Ingeniería de Computadores*, vol.1, no. 6, pp. 119-125 (2016)

Damas, M., Banos, O., Olivares G., Mula F. Complementos para Informática Industrial del perfil de Ingeniería de Computadores del Grado de Informática de la UGR: Controladores Lógicos Programables. *Enseñanza y Aprendizaje de Ingeniería de Computadores*, vol.1, no. 3, pp. 107-119 (2013)

Damas, M., Lopera, J., Banos, O. Una iniciativa para la coordinación y difusión de la docencia del perfil de Ingeniería de Computadores del Grado de Informática de la UGR. *Enseñanza y Aprendizaje de Ingeniería de Computadores*, vol.1, no. 2, pp. 73-80 (2012)

----- Book chapters -----

Damas, M., Olivares G., Gómez, F. Prados, A. M., Olivares, A., Banos, O. Laboratorio Virtual para el Ciclo Completo de Desarrollo de Sistemas de Control Industriales (PID 08-80). *Innovación Docente y Buenas Prácticas en la Universidad de Granada* (2012) ISBN 978-84-338-5400-1

Participation in Teaching Development Courses

Title: Technical Writing & Editing

Organiser: petecom (University of Twente)

Duration: 20 hours

Date(s): 01/09/2017 - 30/09/2017

Title: How to activate students

Organiser: Centre for Educational Support (University of Twente)

Duration: 4 hours

Date(s): 12/06/2017

Title: Storytelling

Organiser: Centre for Educational Support (University of Twente)

Duration: 6 hours

Date(s): 15/05/2017

Title: Supervising Students

Organiser: Centre for Educational Support (University of Twente)

Duration: 10 hours

Date(s): 12/04/2017-19/04/2017

Title: Practical Teaching Skills

Organiser: Centre for Educational Support (University of Twente)

Duration: 20 hours

Date(s): 16/02/2017-02/03/2017

Title: Testing and Assessment

Organiser: Centre for Educational Support (University of Twente)

Duration: 16 hours

Date(s): 10/11/2016-24/11/2016

Title: English for Lectures

Organiser: TCP Language Centre (University of Twente)

Duration: 36 hours

Date(s): 21/09/2016-02/11/2016

Title: Designing a lesson and a course

Organiser: Centre for Educational Support (University of Twente)

Duration: 20 hours

Date(s): 11/05/2016-25/05/2016

Title: Knowledge Management in Academia

Organiser: Quality Assurance Vice-Rector's Office (University of Granada) *Date(s):* 10/03/2014-30/04/2014

Duration: 30 hours

Title: Statistical methods for experimental computation

Organiser: Quality Assurance Vice-Rector's Office (University of Granada) *Date(s):* 10/03/2014-30/04/2014

Duration: 25 hours

Title: Migration of Academic Materials to Open Source

Organiser: Quality Assurance Vice-Rector's Office (University of Granada) *Date(s):* 30/09/2013-30/09/2014

Duration: 175 hours

Title: Digital image processing using open software and online tools *Duration:* 24 hours

Organiser: Quality Assurance Vice-Rector's Office (University of Granada) *Date(s):* 16/09/2013-20/09/2013

Title: Introduction to iOS programming

Organiser: Vice-Rector's Office for Quality Assurance (University of Granada) *Date(s):* 25/06/2013-04/07/2013

Duration: 30 hours

Title: Introduction to Android programming

Organiser: Graduate School (University of Granada)

Duration: 30 hours

Date(s): 25/06/2013-04/07/2013

Arrangement of Academic Agreements

Programme: Erasmus+ Key Action 1 - Mobility for Learners and Staff *Study cycle:* 3rd (postgraduate)
Institutions: University of Twente, University of Granada *Duration:* 2017-2021

Programme: Erasmus+ Key Action 1 - Mobility for Learners and Staff *Study cycle:* 3rd (postgraduate)
Institutions: University of Twente, University of Ulster *Duration:* 2017-2021

SERVICE

Organisational Positions

Institution: IEEE Engineering in Medicine and Biology Society (EMBS)
Position: Member of (#93660605) *Duration:* 2015/today

Institution: International Neural Network Society (INNS)
Position: Member of (#ID4521) *Duration:* 2011/today

Institution: CITIC-UGR Executive Board
Position: Member of *Duration:* 2011/2014

Institution: CITIC-UGR Scientific Committee
Position: Member of *Duration:* 2011/2014

Institution: Department of Computer Architecture and Computer Technology Board
Position: Member of *Duration:* 2010/2014

Editorship International Journals

Associate Editor of Human-centric Computing and Information Sciences (Springer, 01/01/2018 - 31/12/2018)

Guest Editor of the Special Issue on Ubiquitous Technologies for Emotion Recognition of the Applied Sciences journal (MPDI, 25/03/2019-xx/xx/201x)

Guest Editor of the Special Issue on Sensor Technology for Smart Homes of the SENSORS journal (MPDI, 01/12/2018-xx/xx/201x)

Guest Editor of the Special Collection on Internet of Things for Health & Wellbeing Applications of the International Journal of Distributed Sensor Networks (SAGE, 01/09/2018-xx/xx/201x)

Guest Editor of the Special Issue on M-Coaching: Towards the Next Generation of Mobile-Driven Healthcare Support Services of the IEEE Computer Magazine (IEEE, 22/03/2018-16/08/2018)

Guest Editor of the Special Issue on Smart Sensing Technologies for Personalised Coaching of the SENSORS journal (MPDI, 02/04/2017-29/05/2018)

Guest Editor of the Special Issue on Ubiquitous Computing for Health Applications of the Journal of Ambient Intelligence and Humanized Computing (Springer, 30/04/2017-29/05/2018)

Guest Editor of the Special Issue on E-Coaching for Health of the IEEE Computer Magazine (IEEE, 02/04/2017-21/03/2018)

Editorship International Proceedings

Co-Editor of Proceedings of the 12th International Conference on Ubiquitous Computing and Ambient Intelligence, *Proceedings*, vol. 2, issue 19

Organisation International Conferences/Workshops

PC Co-Chair at the International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmi2018)

Posters and Demos Co-Chair at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth2018)

Co-organizer of the Workshop on Intelligent Technologies for Coaching in Health (Health-i-Coach2017, within ACM PervasiveHealth2017)

Organizing Committee member (Health Track Co-Chair) at the International Conference on Ubiquitous Computing and Ambient Intelligence (UCAmi2016, UCAmi2017)

Co-organizer of the Special Session on Assistive Rehabilitation Technology (within IWANN2017)
Organizing Committee member (Publicity Co-Chair) at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth2016)
Co-organizer of the Workshop on Smart Ubiquitous Technologies for Human Behaviour Coaching (SUT4Coaching2016, within IEEE IUCC2016)
Co-organizer of the Workshop on Human Behavior Monitoring, Analysis and Understanding (HBMAU2016, co-located with IWBBIO2016)
Co-organizer of the Workshop on Open Data in Pervasive Health (within the Future of Pervasive Health workshop, co-located with PervasiveHealth2016)

Program Committee International Conferences/Workshops

Steering Committee member at the International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO2017, IWBBIO2018, IWBBIO2019)
Program Committee member at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth2016, PervasiveHealth2017, PervasiveHealth2018, PervasiveHealth2019)
Program Committee member at the International Conference on Ubiquitous Computing and Ambient Intelligence (UCAMI2016, UCAMI2017, UCAMI2018, UCAMI2019)
Program Committee member at the International Work-Conference on Artificial Neural Networks (IWANN2017, IWANN2019)
Program Committee member at the International Conference on Global Health Challenges (GLOBALHEALTH2019)
Program Committee member at the International Workshop on Context-Awareness for Multi-Device Pervasive and Mobile Computing (PerCrowd2019, within PerCom2019)
Program Committee member at the International Work-Conference on Time Series (ITISE2017, ITISE2018)
Program Committee member at the Workshop on Internet of People and Things (IPAT2017, within IEEE SERA 2017)
Program Committee member at the International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO2013, IWBBIO2014, IWBBIO2015, IWBBIO2016)
Program Committee member at the Special Session Track on Smart Things for Active and Assisted Living (ST4AAL) of the EAI International Conference on Smart Objects and Technologies for Social Good (GOODTECHS2016)
Program Committee member at the EAI International Conference on Body Area Networks (BodyNets 2016)
Program Committee member at the IEEE International Conference on Ubiquitous Computing and Communications (IUCC2016)
Program Committee member at the International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM2016)
Reviewers Committee member at the ACM Conference on Human Factors in Computing Systems (CHI2016)
Reviewers Committee member at the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp2015/UbiComp2016)
Reviewers Committee member at the International Symposium on Wearable Computers (ISWC2015/ISWC2016)
Program Committee member at the International Conference on Software, Knowledge, Intelligent Management and Applications (SKIMA2015)

Session Chair International Conferences/Workshops

Session Chair at the Workshop on emotion awareness for pervasive computing with mobile and wearable devices (EmotionAWARE2018, within PerCom2018)

Session Chair at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth2017)

Session Chair at the International Conference on Ubiquitous Computing and Ambient Intelligence (UCAMI2016, UCAMI2017)

Session Chair at the International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO2013, IWBBIO2014, IWBBIO2015, IWBBIO2016)

Session Chair at MIRA Symposium 2016 (MIRA2016)

Reviewer International Journals

Reviewer of the international journal "IEEE Transactions on Systems, Man and Cybernetics: Systems" (IEEE)

Reviewer of the international journal "Biomedical Engineering Online" (BMC)

Reviewer of the international journal "Journal of Biomedical Informatics" (Elsevier)

Reviewer of the international journal "Journal of Medical and Biological Engineering" (Springer)

Reviewer of the international journal "IEEE Transactions on Industrial Informatics" (IEEE)

Reviewer of the international journal "Electronics" (MDPI)

Reviewer of the international journal "Sensors" (MDPI)

Reviewer of the international journal "Journal of System Architecture" (Elsevier)

Reviewer of the international journal "Medical Engineering and Physics" (Elsevier)

Reviewer of the international journal "Journal of Network and Computer Applications" (Elsevier)

Reviewer of the international journal "Journal of Ambient Intelligence and Smart Environment" (IOPress)

Reviewer of the international journal "International Journal of Soft Computing and Applications" (Aloy Publishers)

Reviewer of the international journal "Expert Systems with Applications" (Elsevier)

Reviewer of the international journal "The Scientific World Journal" (Hindawi)

Reviewer of the international journal "Computer Vision and Image Understanding" (Elsevier)

Reviewer of the international journal "Applied Intelligence" (Springer)

Reviewer of the international journal "Journal of Ambient Intelligence and Humanized Computing" (Springer)

Reviewer of the international journal "Pervasive and Mobile Computing" (Elsevier)

Reviewer of the international journal "Computers and Electrical Engineering" (Elsevier)

Reviewer of the international journal "IEEE Transactions on Human-Machine Systems" (IEEE)

OTHER MERITS

Invited Talks

Venue: Masters in Mechatronics (Jaen, Spain)

Talk: Smartphone: "the pocket IoT"

Sponsored by: University of Jaen

Date: 13/06/2019

Venue: Public Health and Preventive Medicine Symposium (Granada, Spain)

Talk: What your smartphone tells about your behaviour

Sponsored by: University of Granada

Date: 16/01/2019

Venue: Wearables in Practice: Physiology and Emotions Symposium (Enschede, Netherlands)

Talk: What your smartphone tells about your behaviour: challenges and opportunities

Sponsored by: 4TU (TU Delft, Tue, University of Twente, Wageningen University)

Date: 22/09/2017

Venue: Connected Health Summer School (Tuscany, Italy)

Talk: Advanced Processing of Sensor Data for Human Behaviour Modelling

Sponsored by: REMIND, H2020 Marie Curie Training Network

Date: 28/06/2017

Venue: International Workshop on Big Data & Knowledge for Healthcare (Suwon, Korea)

Talk: Mining Minds: an Innovative Framework for Personalized Health and Wellness Support
Sponsored by: Brain Korea 21 Plus, Korean National Research Foundation *Date:* 17/10/2015

PhD Thesis Committees

Title: Data processing methods for an in-field use of inertial sensors to investigate gait behaviour in clinical and cognitive psychology applications

Candidate: Carlotta Caramia (Roma Tre University, Italy) *Defense date:* April 08, 2019

Title: Sistemas de laboratorios remotos sobre instrumentación de tiempo real: aplicación a laboratorios de medida de tensión interfacial

Candidate: Jesus Luis Muros Cobos (University of Granada, Spain) *Defense date:* September 28, 2017

Title: DARP: a New Routing Algorithm for Large Communication Infrastructures

Candidate: Francisco José Estévez Ortiz (University of Granada, Spain) *Defense date:* June 20, 2016

PhD Thesis External Review Committees

Title: Extending the Concepts of Type-2 Fuzzy Sets and Systems

Candidate: Gonzalo Ruiz Garcia (University of Granada, Spain) *Review date:* May 11, 2017

Title: e-MoDe: A Framework to support the development of mobile telemonitoring platforms

Candidate: Angel Ruiz Zafra (University of Granada, Spain) *Review date:* June 11, 2016

Reviewer International Projects

Proposal type: PhD fellowships (<http://www.fwo.be/en/fellowships-funding/phd-fellowships/>)

Institution: Research Foundation Flanders (FWO) *Review date:* June 28, 2018

Awards

Distinction: Research Excellence Diploma

Awarded by: Higher Technical School of Information Technology and Telecommunications Engineering of the University of Granada *Date:* May 9, 2019

Distinction: Outstanding PhD Award

Awarded by: University of Granada *Date:* December 2017

Distinction: Second prize in the VI UGR Entrepreneurial contest

Awarded by: University of Granada (“as supervisor of the mDurance project”) *Date:* November 2016

Distinction: Talentum Startup Grant

Awarded by: Telefonica Spain (“as supervisor of the mDurance project”) *Date:* June 2016

Distinction: Second prize to the best project in Telecommunications Engineering

Awarded by: University of Granada (“as supervisor of the mDurance project”) *Date:* May 2016

Distinction: “Emilio Herrera Linares” to the Best Spanish National Graduate Research Project (“as supervisor of the mHealthDroid project”)

Awarded by: University of Granada *Date:* June 2014

Distinction: Best Paper Award of the 5th International Work-conference on Ambient Assisted Living an Active Ageing (IWAAL 2013)

Awarded by: IWAAL2013 Steering Committee *Date:* December 2013

Distinction: Best academic record of the University of Granada (Electronic Engineering)

Awarded by: University of Granada *Date:* February 2011

Distinction: IX Certamen Archimedes to the Best Spanish National Graduate Research Project

Awarded by: Spanish Ministry of Education, CSIC, Astrazeneca Foundation, Orange Fundation, Banco Santander *Date:* November 2010

Distinction: “Emilio Herrera Linares” to the Best Spanish National Graduate Research Project

Awarded by: University of Granada *Date:* June 2010