



Joaquim Bellmunt Montoya, Ph.D.

*Interested in technological innovations that respond to societal demands.
Data Science, Internet of Things, and Cloud Computing.*

📍 Singapore
📍 Barcelona, Oct 15th 1987
✉️ joaquim.bell@gmail.com
☎️ (+65) 81193783
💬 quimbell
🌐 joaquimbellmunt

WORK EXPERIENCE



PIXIUM DIGITAL PTE LTD., *Artificial Intelligence Consultant*

Jul 2016 - Today

Pixium Digital was founded in 2015 by Digital market experts and experienced developers with the goal of providing everyone with a customised digital solution: **Mobile Development, Data Science, IoT, ML and Knowledge Aggregation.**



IMAGE AND PERVASIVE ACCESS LAB (CNRS UMI), *Research Assistant*

Jul 2014 - Nov 2017

Ph.D. Student attachment. focusing on Semantic Reasoning, Data Mining, Human Condition Computation and Context-Aware Service Delivery in Ambient Assisted Living deployments for Ageing in Place. **Ambient Assisted Living Framework presentation: UBISmart v4.0**

Project Management

- **City4Age and Pulse (HORIZON 2020)** System Architect and Technical Project Manager in 2 Pilot sites (Singapore and Montpellier) in a European project focusing on the use of IoT technologies to help frail elderly to live with independence and safety. The technologies used include: Raspberry Pi, X10 and Z-Wave sensors and beacons; Cloud computing (AWS EC2 and DigitalOcean), RESTful and OpenData API aggregation; MQTT client and broker; code development on NodeJS, Python and Android; etc.



KPMG, *IT Auditor*

Nov 2013 - Apr 2014

Systems Auditor for annual audits in several multinational companies.



LIRMM, *Research Intern*

Mar 2013 - Sep 2013

Master Thesis Internship in Medical Robotics.



DEPT. OF SIGNAL THEORY AND COMMUNICATIONS, *Fellow Intern*

Feb 2011 - Jan 2012

Part of my responsibilities were the computer maintenance and support for all department staff.

EDUCATION



PHD. IN COMPUTER SCIENCE

Jul 2014 - Nov 2017

Institut Mines-Télécom, University of Montpellier (CNRS UMI), France

3 years Ph.D. Program in Computer Science.



ICT FOR HEALTH SPECIALISATION

Sep 2012 - Sep 2013

Institut Mines-Télécom, Université Montpellier, École des Mines d'Alès, Montpellier, France

Master Degree with Specialty in Information and Technology in the Health field.



MSC. IN TELECOMMUNICATIONS ENGINEERING

Feb 2012 - Sep 2013

ENS Telecom Bretagne, Brest, France

Double Master Degree program with TelecomBCN.



BSC AND MSC. IN TELECOMMUNICATIONS ENGINEERING

Sep 2005 - Jan 2012

TelecomBCN (ETSETB, UPC Barcelona Tech), Spain

Modules in Probability & Statistics, Data & Signal Processing, Telematics, Communications, etc.

SKILLS & INTERESTS



Native Speaker



Native Speaker



Bilingual



Full Competence



- **Data Science** - Web 3.0; OWL-RDF; Numpy; Pandas.
- **Web** - NodeJs; PostgreSQL; REST; MQTT; SSH.
- **Languages** - JavaScript; Java; Python; N3; Bash; R; Git.
- **Framework** - Domoticz; RasPi; Android; Ionic; Sails.
- **IDE** - Xcode; Eclipse; Matlab; Jupyter.



Sportive, specially Football, and Barça fan. Cinema, traveling, driving.



- Founder and Manager of two football teams in Singapore regrouping European people.
- Board member of [Telecogresca](#) in 2011 and 2012. Telecogresca is a student association, which organizes a music festival hosting every year more than 10.000 people. Former Vice-President of the sports student association at TelecomBCN, CET, which organizes every semester different sportive competitions, such as Football, Basketball or Volleyball.

PUBLICATIONS

- Kodys, M., Oliver, P., **Bellmunt, J.**, Aloulou, H., Kaddachi, F. & Mokhtari, M. Smart Mobility in Urban Assisted Living Environments. In *Information Integration and Web-based Applications & Services*, 2017. *Accepted*
- Kodys, M., **Bellmunt, J.**, Aloulou, H. & Mokhtari, M. Oh, wait, reasoning was wrong! Let's replay. In *Semantic Web Technologies for the Internet of Things*, 2017. *Accepted*
- **Bellmunt, J.**, Mokhtari, M., Abdulrazak B., Aloulou. Validation of an Ubiquitous Computational Frailty Model Towards an Adaptable Ambient Assisted Living Framework. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies & UbiComp. 3rd Issue Nov.* ACM, 2017. *Under Review*
- Aloulou H., Endelin R., Mokhtari M., Abdulrazak B., Kaddachi F., **Bellmunt, J.** Activity Recognition Enhancement Based on Ground-Truth: Introducing a New Method Including Accuracy and Granularity Metrics. In *ICOST*. Springer, 2017.
- Sadek, I., **Bellmunt, J.**, Kodyš, M. & Mokhtari, M. Novel Unobtrusive Approach for Sleep Monitoring Using Fiber Optics in an Ambient Assisted Living Platform. In *ICOST*. Springer, 2017.
- Kadachi, F., Aloulou, H., Abdulrazak, B., **Bellmunt, J.**, Endelin, R., Mokhtari, M. & M.Fraisse, P. Technological Approach for Behavior Change Detection toward Better Adaptation of Services for Elderly People. In *Health Informatics*. 2017.
- **Bellmunt, J.**, Mokhtari, M., Abdulrazak, B. & Aloulou, H. Agile Framework for Rapid Deployment in Ambient Assisted Living Environments. In *Information Integration and Web-based Applications and Services*. ACM, 2016.
- Aloulou, H., Abdulrazak, B., Endelin, R., Kadachi, F. & **Bellmunt, J.**. Detecting Inconsistencies in Rule-Based Reasoning for Ambient Intelligence. In *Engineering of Complex Computer Systems (ICECCS)*. IEEE, 2016.
- **Bellmunt, J.**, Mokhtari, M., Abdulrazak, B., Aloulou, H. & Kodys, M. Experimental Frailty Model Towards an Adaptable Service Delivery for Aging People. In *Engineering of Complex Computer Systems (ICECCS)*. IEEE, 2016.
- Aloulou, H., Abdulrazak, B., Endelin, R., Bentes, J., Tiberghien, T. & **Bellmunt, J.**. Simplifying Installation and Maintenance of Ambient Intelligent Solutions Toward Large Scale Deployment. In *ICOST*. Springer 2015.
- **Bellmunt, J.**, Tiberghien, T., Mokhtari, M., Aloulou, H. & Endelin, R. Technical Challenges Towards an AAL Large Scale Deployment. In *ICOST*. Springer, 2015.

COURSES & AWARDS

Courses

- Google Cloud Platform Big Data and Machine Learning Fundamentals, 2017 (Coursera)
- Semantic Web Summer School, 2015 (SWSS)
- Machine Learning, 2014 (Coursera)
- OpenHPI, Semantic Web Technologies, 2013 (OpenHPI)

Awards



IOT HACKATHON, I²R/A*STAR - ETPL - SIAA

Apr 2015

First Runner Up at IoT Hackathon organized by I²R/A*STAR - ETPL - SIAA

REFEREES

PROF. MOUNIR MOKHTARI

IPAL & Institut Mines-Télécom

Ph.D. Director

IPAL Director

mounir.mokhtari@ipal.cnrs.fr