



JAIME PANDO ACEDO

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EDUCATION

Universidad Nacional de Educación a Distancia <i>Bachelor of Science Degree in Software Engineering</i>	Sep. 2017 – Jun. 2022 Badajoz, Spain
Universidad de Extremadura <i>Doctor of Philosophy Degree in Electrical Engineering</i>	Jun. 2017 – Jul. 2021 Badajoz, Spain
Universidad de Extremadura <i>Master of Science Degree in Research in Engineering Science</i>	Sep. 2014 – Jun 2015 Badajoz, Spain
Universidad de Extremadura <i>Bachelor of Science Degree in Electrical Engineering</i>	Sep. 2010 – Sep. 2014 Badajoz, Spain

GRANTS AND AWARDS

DoRa Plus <i>Research visitor at Tallinn University of Technology</i>	Sep. 2018 Tallinn, Estonia
Best Final Project in Electrical Engineering Award <i>Best final project in the academic course 2014/2015</i>	Oct. 2015 Badajoz, Spain
Americampus <i>Exchange student at the University of New Mexico</i>	Oct. 2013 Albuquerque, USA

OTHER COURSES AND CERTIFICATES

Certified Kubernetes Application Developer <i>Linux Foundation</i>	March 2025
Certified Kubernetes Administrator <i>Linux Foundation</i>	Jul. 2023
Microcontrollers programming using C language <i>Universidad de Extremadura</i>	May. 2017 Badajoz, Spain
Android applications programming course <i>Universidad de Extremadura</i>	Dec. 2016 Badajoz, Spain
Certificate in Advanced English <i>ESOL by Cambridge University</i>	May. 2013 Badajoz, Spain

EXPERIENCE

Crossvale Inc <i>Integration engineer</i> <ul style="list-style-type: none">• Application modernization using microservices frameworks• Development of middleware for data streaming and processing• Administration Openshift clusters	Oct 2023 – ongoing Remote
Universidad de Extremadura <i>Backend Developer</i> <ul style="list-style-type: none">• Development of Moodle plugins using PHP	Mar 2022 – Oct 2023 Cáceres, Spain

- System administration of virtual servers
- Administration of dynamic webpages using Drupal as CMS

Universidad de Extremadura

Jun 2017 – Jul 2021

PhD. Candidate

Badajoz, Spain

- Development of advanced motor control techniques: sensorless control
- Merging of the propulsion and charging systems of the vehicle
- Passive elements reduction by using the motor windings as grid filters
- Development of active damping control strategies to mitigate the vibrations observed

Universidad de Extremadura

Apr 2016 – Apr 2017

Lab technician

Badajoz, Spain

- Design and simulation of AC/DC converters connected to grid
- Design and simulation of DC/DC converter for energy storage management
- Prototype design and construction for a bidirectional charger using rapid prototyping tools
- Development of power flow management and harmonic current correction
- Hybridization of the energy storage system: batteries and supercapacitors

SOFTWARE SKILLS

Containerization

- Containerization of applications using Docker containers
- Openshift cluster management and administration

Java programming

- Microservices development using Springboot, Java DSL and Apache Camel.
- Management of complex Java projects using Maven

Shell

- Use of UNIX tools like awk, sed, etc
- Remote administration using SSH of systemd based systems, task planification using crontab

Web

- Responsive webpages developing using HTML, CSS and frameworks like Bootstrap
- Configuration of web servers based in apache or nginx

C programming

- Interprocess communication using IPC mechanisms: semaphores, message queues, shared memory
- C programming of microcontrollers: PWM, interruptions, communication using I2C, ISP, etc

Other software

- | | |
|---|---|
| • Version control with Git | • Graphics editing with Inkscape |
| • Programming IDEs: IntelliJ, Eclipse, Android Studio | • Basic knowledge of Python, Haskell, Prolog |
| • Typesetting with \LaTeX | • Scripting and simulating with MATLAB Simulink |
| • Office software: LibreOffice, MS Office | • Digital circuit design with VHDL |

Other software

- Version control with Git
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- Digital circuit design with VHDL

OTHER SKILLS

Languages

- Spanish, native
- English, C1 certificate
- French, second language in high school

Soft skills

- Used to work in international environments
- Good at teamwork, always willing to help
- Logical thinking, curious by nature

Research skills

- Self-sufficiency, even in tasks with no prior experience
- Consulting of scientific and technical documentation
- Information organizing and synthesis, presenting and exposition
- Redacting clear and well-organized documents, including scientific reports

PUBLICATIONS

- J. Pando-Acedo, M. I. Milanés Montero, E. Romero Cadaval, F. Briz, and F. Barrero-González, "Improved Three-Phase Integrated Charger Converter Connected to Single-Phase Grid with Torque Cancellation," IEEE Access, vol. 9, pp. 108266-108275, 2021, doi: 10.1109/ACCESS.2021.3101942
- M.-I. Milanes-Montero, F. Barrero-Gonzalez, J. Pando-Acedo, E. Gonzalez-Romera, E. Romero-Cadaval, and A. Moreno-Munoz, "Active, Reactive and Harmonic Control for Distributed Energy Micro-Storage Systems in Smart Communities Homes," Energies, vol. 10, no. 4, Art. no. 4, Apr. 2017, doi: 10.3390/en10040448
- J. Pando-Acedo, E. Romero-Cadaval, M. I. Milanes-Montero, and 15 F. Barrero-Gonzalez, "Improvements on a Sensorless Scheme for a Surface-Mounted 16 Permanent Magnet Synchronous Motor Using Very Low Voltage Injection," Energies, 17 vol. 13, no. 11, Art. no. 11, Jan. 2020, doi: 10.3390/en13112732
- M. I. Milanés-Montero, F. Barrero-González, J. Pando-Acedo, 9 E. González-Romera, E. Romero-Cadaval, and A. Moreno-Munoz, "Smart Community 10 Electric Energy Micro-Storage Systems With Active Functions," IEEE Transactions 11 on Industry Applications, vol. 54, no. 3, pp. 1975-1982, May 2018, doi: 12 10.1109/TIA.2018.2799547
- J. Pando-Acedo, M. I. Milanés-Montero, E. Romero-Cadaval, M. A. Guerrero-Martínez, F. Barrero-González, and E. González-Romera, "Active power flow strategies for bidirectional Energy Storage Units in smart communities," in 2017 11th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Apr. 2017, pp. 614-619. doi: 10.1109/CPE.2017.7915243
- A. Rassolkin, H. Heidari, A. Kallaste, T. Vaimann, J. P. Acedo, and E. Romero-Cadaval, "Efficiency Map Comparison of Induction and Synchronous Reluctance Motors," in 2019

26th International Workshop on Electric Drives: Improvement in Efficiency of Electric Drives (IWED), Jan. 2019, pp. 1–4. doi: 10.1109/IWED.2019.8664334

- J. Pando-Acedo et al., “Hybrid FEA-Simulink Modelling of Permanent Magnet Assisted Synchronous Reluctance Motor with Unbalanced Magnet Flux,” in 2019 IEEE 12th International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED), Aug. 2019, pp. 174–180. doi: 10.1109/DEMPED.2019.8864925
- J. Pando-Acedo, E. Romero-Cadaval, C. Gragera-Peña, and M. I. Milanés-Montero, “Noise, Vibration and Harshness on a Permanent Magnet Synchronous Motor for a Remote Laboratory,” in Technological Innovation for Smart Systems, Cham, 2017, pp. 382–389. doi: 10.1007/978-3-319-56077-9_37