

Erwin José López Pulgarín

40 Argus Rd, BS3 3PA, Bristol, UK
☎ +4407541928951
✉ erwinkendo@gmail.com



Education

- 2007–2012 **Mechatronics Engineer**, *Universidad Nacional de Colombia*, Bogotá, Colombia.
gpa: 4.1/5.0
honors: Honorary Tuition (2007-II)
jobs: Mechatronics Curricular Office Monitor (2009)
Office Monitor for the Academic Coordination of Dental Clinics (2009-2011)
Student intern at the Mobile Robotics Research Group UNROBOT (2012)
societies: Chairman of the Society for the Mechatronics Engineering Students of the National University of Colombia CEIMTUN (2009 - 2012)
Course rep for Student Union (2008-2010)
Main developer at project SIEBOT
Junior researcher at the Mobile Robotics Research Group UNROBOT

Experience

- 2015–current **PhD Researcher**, *University of Bristol*, Bristol, UK.
Novel control techniques based on human behaviour estimation and prediction for safe and compliant Human-Robot interaction.
- 2013–current **CTO & Co Founder**, *TEE SAS*, Bogotá, Colombia.
Generate and validate new technologies and project and product development methodologies offered by the company. Technical feasibility for hardware and software based products and services. Technological Prospecting. High level architecture design and Low level programming for hardware and software.
- 2014–2015 **Young blood researcher**, *Universidad Nacional de Colombia*, Bogotá, Colombia.
Research Data-driven Fault Detection and Isolation techniques (FDI) for wind farm generators.
- 2013–2014 **Research Assistant**, *Universidad Nacional de Colombia*, Bogotá, Colombia.
Firmware design for embedded system, real time controller implementation applied and electronics management for UAV project Colciencias 2012: Design and Manufacture of an UAV with remote assistance to monitor overhead power lines and pipelines.
- 2013–2013 **Research Assistant**, *Universidad Nacional de Colombia*, Bogotá, Colombia.
Firmware design for embedded system and real time controller implementation applied to project Colciencias 2011: Design and Manufacture of Parallel Architecture structure for 5 axes tooling.
- 2012–2013 **Research Assistant**, *Universidad Nacional de Colombia*, Bogotá, Colombia.
Programming and embedded systems development for research project "Mobile robotic platform for teaching robotics"

Technical Experience

Computer Architectures x86/x64, ARM Cortex-M3, ARM Cortex-M4, ARM A series, MSP430

OS Windows, Linux (embedded, desktop, server)

languages and technologies C, C++, Java, HTML, Javascript (client and server), CSS, Python, Php, Sql, mongoDB, ASM

frameworks y libraries Qt, RTOS (ChibiOS), OpenCV, AngularJS, SFML

Office Software Microsoft Office, OpenOffice/Libreoffice

CAD/CAE NX6, Autocad, CATIA, DELMIA

COM protocols serial (RS-232, single, RS-485), I2C, SPI, parallel, ethernet, WiFi 802.11b/g/n, Bluetooth 2.0 and 4.0, USB 2.0, CAN

Calculus tools Matlab, Scilab

HDL Verilog, HDL

Honours

- 2011 DAAD Scholarship holder - Study trip scholarship, German Academic Exchange Service (DAAD)
- 2013 4th place, Best Technological Innovation Product (TEE SAS), Destapa Futuro Prize, Entrepreneurship Network Bavaria
- 2014 Young blood researcher 2012 fund holder, COLCIENCIAS
- 2014 PhD Scholarship holder, COLCIENCIAS Newton-Caldas Fund