

Ángel Longueira-Romero

Education

- 2019–2022 **PhD in Industrial Cybersecurity**, *Faculty of Engineering*, Mondragon University, Metric-Based Cybersecurity Evaluation Methodology for Industrial Embedded Systems.
Specialization in:
- Cybersecurity Evaluation Standards.
 - Vulnerability analysis.
 - Cybersecurity measurement.
- 2017–2019 **Master's degree in Automation Engineering and Industrial Informatics**, *Gijón Polytechnic School of Engineering*, University of Oviedo, Specialised in Optical Techniques for Industrial Inspection.
Other Activities:
- Class President.
- 2012–2017 **Bachelor's degree in Industrial Electronics and Automation Engineering**, *Gijón Polytechnic School of Engineering*, University of Oviedo, Specialised in Industrial Robotics.
Other Activities:
- MENTOR Programme. Providing help to new Erasmus students in the campus.
 - Member of the self-evaluation committee of the Industrial Electronics and Automation Engineering degree.
 - Tandem language exchange programme of the University of Oviedo.

Academic Dissertations

- 2019–2022 **Ph.D. Thesis**, *Mondragon University*, Arrasate, Metric-Based Cybersecurity Evaluation Methodology for Industrial Embedded Systems.
- 2018–2019 **Master's Thesis**, *IKERLAN*, Arrasate, Design and Implementation of a PKI Infrastructure with Automatic Reenrolment of Certificates for Industrial Embedded Systems.
With Honors
- 2017 **Undergraduate Thesis**, *Thermal machinery and engines team. Department of Energy*, Gijón, Design of a temperature regulation system for a Stirling engine heater.
With Honors

Training

- 2018 **IEC 61131 Edu Net Certificate**, *Automation technology in theory and practice according to IEC 61131*.
- 2023 **TEEPwn - Raelize Certificate**, *Trusted Executions Environments based on TrustZone*.
- 2024 **Cybersecurity in the Electric Sector - CCI**, *Design, Operation and Maintenance of cybersecurity* - .

Experience

- 2023–Present **Industrial Cybersecurity Researcher**, *Tecnalia*, Derio (Spain).

- 2022–2023 **Industrial Cybersecurity Researcher**, *IKERLAN*, Arrasate (Spain).
- 2019–2022 **PhD Candidate**, *IKERLAN*, Arrasate (Spain).
- 2018–2019 **Industrial Cybersecurity Intern**, *IKERLAN*, Arrasate (Spain), Worked at the Industrial Cybersecurity Team deploying a PKI with automatic reenrolment using SCEP, EST and OCSP for embedded devices with two HSMs.
- 2017–2018 **Amplification Equipment Repair Apprentice**, *Ortodoxo Amplification (Now: Bell Tone Vintage)*, Gijón, Worked with Marco Fernández designing, building and repairing vacuum tube and solid state musical equipment, and developing ad hoc tools.
- 2016–2017 **Mentoring and Tutoring**, Private lessons of industrial technology, mathematics, physics, chemistry, technical drawing and music to high school students.

Technical Skills

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|-------------------------|---|
| OSs | Windows, GNU/Linux. |
| Programming | C, C++, Python, assembly. |
| Databases | PostgreSQL, MySQL. |
| Cloud | AWS. |
| Software | MatLab, R, Altium. |
| Hardware | FPGAs, Microcontrollers, PCB design. |
| TEE | ARM TrustZone, OPTEE, Intel SGX. |
| Robotics and Automation | ROS, UNITY, CODESYS, TIA Portal |
| Standards | ISO 9001, ISO 27005, ISA/IEC 62443, Common Criteria, SAE J3061. |
| Methodologies | NIST 800 Serie Reports, OWASP, OSSTMM, MAGERIT, STRIDE |
| Data Analysis | Machine Learning, Computer vision, Data Processing, Data Visualisation. |
| Cybersecurity | Cryptography, Public Key Infrastructure (PKI), Risk Analysis, Threat Modelling. |
| Protocols | SCEP, EST, OCSP. |
| Other | Microsoft Office, L ^A T _E X. |

Languages

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|---------------|---------------------|---------------------------------------|
| Spanish | Native | |
| English | Fluent | |
| Portuguese | Intermediate | <i>Con conversationally fluent</i> |
| Basque | Intermediate | <i>Con conversationally fluent</i> |
| SerboCroatian | Intermediate | <i>Currently assisting to lessons</i> |
| German | Basic | <i>Basic words and phrases only</i> |
| French | Basic | <i>Basic words and phrases only</i> |

Transferable Skills

- Teamwork
- Written and verbal communication
- Fast learner and proactive problem solving
- Self management
- Research and analytical skills

Interests

- 3D design with Fusion 360 (Autodesk)
- Arduino projects
- Language learning
- Travelling
- 3D printing (Simplify3D and Cura)
- Raspberry projects
- CrossFit and Bike
- Music (Electric Bass and Oboe)

Other Information

- Willing to travel
- Driving license