DANIEL PAYNO ZARCEÑO

Telecommunications & electronics engineer

@ payno97@gmail.com 📞 +34 638 587 538 📍 Madrid, Spain in daniel-payno-zarceño ⌂ dpayno

ABOUT ME

Telecommunications engineer with a deep passion for electronics and programming, specializing in embedded systems and Linux-based operating systems. I enjoy embracing new challenges and contributing to innovative work environments.

EXPERIENCE

Hardware & firmware engineer
TycheTools

📅 August 2020 – April 2025 📍 Madrid, ES

Company specialized in **data center energy efficiency**, focused on environmental monitoring, and cooling system control.

- **Hardware engineering**: requirement gathering, PCB design and manufacturing, assembly, prototyping, and testing. Purchasing management, communication with suppliers, and RFQs.
- **Firmware engineering**: design and implementation of embedded systems, including microcontroller programming, communication protocols, and sensor networks.
- **Software development**: development of Linux-based systems using Yocto, and implementation of C and Python applications.
- **Data center experience**: installation of sensor networks, cooling optimization and energy consumption management.

Electronic Research Internship
GreenLSI (Department of Electronic Engineering, ETSIT)

📅 May 2020 – August 2020 📍 Madrid, ES

- Research and development of Bluetooth Mesh networks based on Nordic nRF52 microcontrollers.

TECHNICAL SKILLS

| C/C++ | Python | Bash | Dart |

| Nordic | ESP | ST | AVR | PIC | ARM |

| I2C | SPI | UART | RS232 | RS485 | Wi-Fi | BLE |
| LoRa | NFC | MQTT | Modbus | SNMP | Raft |

| Git | Linux | Makefile | Docker | Yocto |

| LaTeX | Markdown | PlatformIO |

| KiCad | 2D/3D CAD | Blender |

| API REST | NGINX | SQL | Django | FastAPI |
| LVGL | Flutter | Raspberry Pi | Wireshark |

| Jira | Agile | Product development |
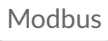
EDUCATION

Master of Science in Electronic Systems Engineering
Universidad Politécica de Madrid, ETSIT

📅 2021 – 2022 📍 Madrid, ES

🏆 Award for the best record in the 2021-2022 academic year. Sponsored by Fundetel.

Bachelor of Engineering in Telecommunication Technologies and Services Engineering
Universidad Politécica de Madrid, ETSIT

📅 2015 – 2020 📍 Madrid, ES

LANGUAGES

Spanish ●●●●●

English ●●●●◐

SOFTSKILLS

- Problem-solving
- Teamwork
- Adaptability, flexibility
- Agile methodologies, Scrum

PROJECTS

Design and implementation of a sensor network for air quality monitoring
Final Master's Degree Project

📅 January 2022

Design and implementation of a MIDI controller for aerophone instruments
Final Degree Project

📅 January 2020

OTHERS

- **DIY** projects: 3D printing, **self-hosted** services ⟳ Immich InfluxDB Home Assistant Grafana
- Design of electronic music devices.
- **Driving license** B and own car.