

Eduard Tiron Martinez

- Software engineer -

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WORK EXPERIENCE

Eurecat *Software Engineer* **01/2021 – 01/2024 (3 years)** *Barcelona, Spain*

[Eurecat](#) is an R&D center offering services for technological companies wanting to innovate.

- Brought in new clients by taking projects no other department felt comfortable accepting; showed great capacity to learn new stacks.
- Lead the development of many projects from planning phase to shipping:
 - Deep learning AI software to recognize defects in textiles | Python plugin for Cura: FEM analysis of 3D printed parts | Cloud-connected tractor with smart fertilization via satellite data and geolocation | IoT system for predictive maintenance of a global fleet of threading machines | Firmware for EV conversion of a mining excavator

Ultrasion *Software Engineer* **11/2017 – 01/2021 (3 years)** *Barcelona, Spain*

[Ultrasion](#) is a disruptive manufacturer of ultrasound-based plastic injection molding machines for fabrication of mostly medical parts.

- Rewrote company's entire codebase from previous 7 years, heavily reduced technical debt, and made further development much more agile (hours instead of days for a new functionality) and less prone to bugs in production.
- Implemented all new requested functionalities as the ultrasound molding technology progressed.
- Enhanced client's UX through improvement of the UI design and simplification of all machine functions.
- Saved the company 10000s of € by making the new website (ultrasion.eu) and solving most IT issues in the office ASAP.
- Solved 100% of clients' support requests that were derived to me when all other coworkers could not solve them.
- Reduced my workload through process improvements and automation to the point that, by 2021, I could work nearly full-time on projects for the parent company (Eurecat), while still meeting all the programming needs at Ultrasion.

PwC *Auditor (Systems & Process Assurance, IT security)* **09/2015 – 10/2016 (1 year)** *Barcelona, Spain*

[PwC](#) (formerly PricewaterhouseCoopers) is an accounting firm and the 2nd largest provider of professional services.

- Interviewed clients and performed work to ensure the correct configuration of many different systems:
 - Application security audits (SAP, clients' in-house software...).
 - Database security audits (Oracle, DB2, MySQL...).
 - OS security audits (Windows/Active Directory, Unix, AS400...).
 - Financial reporting processes reviews.
 - Automated tests (CAAT) on General Ledger for financial year close.
 - Other data services (e.g., data quality reviews, data migration assurance...).

Novatec Enginyers *Internship - Engineering & IT assistant* **Summer '13 & '15 (6 months)** *Tortosa, Spain*

Plásticos Castellá *Internship - Control systems assistant* **Summer '12 (3 months)** *Tortosa, Spain*

Pentriro, Sofegar *Internship - Maintenance department assistant* **Summer '07 (3 months)** *Tortosa, Spain*

EDUCATION

▪ **UPC (Polytechnic University of Catalonia)** *Masters (MSc) in Industrial Engineering, Automation* **2015** *Barcelona, Spain*

▪ **UPC BarcelonaTech** *Masters (Msc) in Mechatronics Engineering* **2017** *Barcelona, Spain*

SKILLS

- **WebDev:** React.js, Next.js, Tailwind CSS, JavaScript, TypeScript, HTML, HTML5, CSS, Bootstrap, WordPress, Full-stack
- **Development:** Python, C, C++, C#, .NET, Qt, Unity, Git, Subversion (SVN)
- **Data Science:** Pandas, Matplotlib, Machine learning, Scikit-learn, Deep learning, Tensorflow, Node-RED, MQTT
- **DevOps:** Linux, Docker, Kubernetes
- **Mechatronics:** PLCs, B&R, Codesys, Structured Text (ST), Ladder, Turck, Panasonic, FPWIN, HMWIN, TX Visu Pro, J1939, ISOBUS, CAD, SolidWorks, 3D printing
- **Electronics:** Arduino, Altium, KiCAD

LANGUAGES, CERTIFICATIONS

- **Languages:** English C2, Certificate of Proficiency (CPE) | Spanish (native) | Catalan (native) | Currently learning German
- **Certifications:** IBM Data Analyst, IBM Data Science, Certified Associate in Project Management (CAPM)