

Eugenio Panadero

availability Full-time

level Senior

language Python

- [x] Spain, Alicante (CET🕒), working ****remote****
- [x] [eugenio.panadero@gmail.com]

Developer with 12+ years of experience (last 5+ focusing on `Python3`), interested in web applications, data analysis & ML, IoT, home automation, and energy & electrical industries.

Skills

- * A ****high level of adaptability**** to new problems, new frameworks, and new teams, after a long career developing software for web and desktop apps, microservices, ESP microcontrollers, industrial automation, and home automation.
- * ****Domain expertise**** on Energy Efficiency, Systems Modeling, HVAC systems, Building Services Engineering.
- * Expertise on code debugging and code refactoring, ****TDD****, MVC pattern, OOP, HTTP methods and RESTful arch.
- * ****Problem-solver****. Proactive, self-directed and solution-oriented with the ability to evaluate complex problems, manage and prioritize tasks to complete projects of any size.
- * ****Quick learner****. Love to work with multidisciplinary teams and dive into new technologies or stacks.
- * ****Strong communication skills****. Assertiveness and security in the exposition of ideas, and the ability to listen and learn in the ongoing dialogue with my colleagues.

Tech stack

- * Extensive experience with `Python` `_aiolibs_` (`_aiohttp`, `_aiopg`, `_aioredis`, `_aiojobs`) and `_flask` for ****WebDev****, and `_PyData_` stacks (`_pandas`, `_numpy`, `_matplotlib`, `_scipy`, `_sklearn`, `_seaborn`, `_bokeh`) for ****DataScience****, and fluent with GIS tools, OpenCV, PyTorch, `_networkx`, `_selenium`, `_numba`, and many more.
- * Proficient with all kinds of ****SQL/NoSQL databases**** (MySQL, PostgreSQL, InfluxDB, MongoDB), message ****brokers**** (MQTT, Redis, Celery), and ****containerization****/virtualization systems (Docker, VMs).
- * Skilled unit & integration test writer with `_pytest`, hands-on experience with CI/CD workflows and environments (Travis CI, Gitlab CI, `_tox`, OpenAPI/Swagger).
- * Markdown enthusiast, competent with HTML templating and CSS, clumsy but functional on (Virtual)DOM dev.
- * Comfortable with all kinds of Linux environments, but also with Windows & macOS desktops.

Professional experience

`_2019-2020_`

****Senior Python Backend Developer**** on a small agile team, to support new products and company processes for [[Remak a.s.](#)], in a full remote position.

- * Building a large (and scalable) micro service architecture platform, by creating ****async microservices**** and other tools such as `_Excel parsers_`, `_DLL wrappers_`, or `_SolidWorks API controllers_`,
- * working with Gitlab CI, Sentry, OpenAPI spec, and `_poetry` & `_pre-commit` hooks,
- * and applying domain expertise on HVAC systems.

`_2017-2018_`

****Freelance developer****, solving automation problems and helping to create IoT products for companies, including:

- * a backend development and cloud deployment of an IoT commercial product; this entitled real-time data processing, push alerts, and a `_flask_` JSON API for companion apps, using InfluxDB + MongoDB, JWT auth, `_Celery`, `_Redis`, `_Gunicorn` and `_Nginx`;
- * the design and development of an IoT product based on ESP32 SoC, this involved high levels of security and energy efficiency given that the device was used for measuring and analysing sleep metrics.

`_2015-2016_`

****Self-training period**** developing small personal projects of increasing complexity,

- * learning `_Python3_` scripting and data analysis toolkit from a MATLAB expert PoV,
- * updating `_C_` and `_C++_` knowledge on ****firmware programming**** for Arduino and other SoC families,
- * and embracing ****FOSS**** (`_free and open-source software_`) and the ****maker culture****.

2007–2015

R&D Engineer and **Product/Project Manager** at [CYPE Ingenieros, S.A.](#),

- * leading agile teams of Software Engineers to create and maintain technical desktop apps for Windows,
- * acquiring deep domain expertise on areas such as Energy Performance of Buildings, HVAC systems, Solar energy, Acoustics, or Fire Dynamic Simulation,
- * creating analytical and numerical algorithms on **MATLAB** (for PoC) and **C** to model physical systems and solve Building Services related problems,
- * and falling in love with Software Development and programming.

2006–2007

Technical Support Engineer in the Building Services Department at [CYPE Ingenieros, S.A.](#),

- * writing technical manuals and giving one-to-one support to architects and engineers using the company's technical software for Architecture, Engineering and Construction.

2006

Paid scholarship at [Pikolinos](#), as **Assistant to the Chief Operations Officer**,

- * learning about raw material logistics in the footwear industry.

Education

My primary STEM *_orthodox_* education is a **BSc(hons) Industrial Engineering** by [Universidad Miguel Hernández de Elche](#) 🎓 (ScD equivalent, B+5U), but I consider myself a **perpetual learner**, always rounded by tech before and after that, since I was a child playing with my father's [MSX](#) to nowadays when I populate my house with custom-made & custom-programmed ESP32 SoC :)

During this long period I had time to attend and learn from many and very varied courses ranging from one on forensic fire analysis 🔥 to another on object recognition with OpenCV3 :, going through building acoustics 🗣️, solar installations ☀️, 3D modeling 🛠️, or deep learning with PyTorch 🤖, but I've always had a **project-focused orientation** when working, so that's where I've learned the most.

I've also taught some courses and classes, ranging from usage of Building Energy Analysis tools to teaching the basic chemistry of wine 🍷 to a future oenologist, but as a **curiosity-driven** person, I enjoy it much more when I'm the one who's learning, surrounded by people to learn from.

Languages

- * **Spanish**, mother tongue
- * **English**, with professional working proficiency (ILR 3+)
- * **Python3**, always *Black*, PEP8-compliant, documented, tested, usually typed, and readable
- * Fluent in **C**, comfortable reading **C++**, **Java** & **JS**, rookie on **shell** scripting
- * Can read Portuguese, French, and almost any code written by a human :)
- * Happily forgetting others like **MATLAB**, **VBA**, or **Excel** at expert level because of lack of use.

Social profiles | Free time

I'm (consciously) not very active on social networks, but you can find me on **GitHub**, **GitLab** and [LinkedIn](#), or ping me at [Telegram](#).

When I have some time to spare I like to contribute to open-source projects like [HomeAssistant](#) or play with data analysis or data visualization tools (like [this one for an Excel formulae logic parser](#) or [this other one to plot psychrometric charts](#)), but what I really love is to just read a good Sci-Fi novel 🚀 in a quiet place 🌴, or enjoy a nice dinner with my soul mate 🍷.