Valerio Farrotti

Python Backend Developer

+393883618172 valerio.farrotti@gmail.com Italy github.com/vallops99
linkedin.com/in/valerio-farrotti valerio.farrotti.com

Profile

Python backend developer with 8+ years of experience, 4+ of which with Django, building APIs, microservices, data ingestion/processing systems and automated reporting pipelines.
I care about performance, code quality and testing: my best result is a refactored data ingestion system that runs 30% faster at 50% lower cost. I contribute to open source projects and I'm always looking for better ways to build reproducible, maintainable software. My passion for coding drives me to continuously learn and innovate.

Professional Experience

Freelance Backend Developer, *Myself* 05/2025 – present | Italy

- Brought a startup's software up to common software development standards, improving product quality both in the codebase and from the customer's point of view;
- Improved the speed of DXF file analysis and standardized errors across DXF parsing and product analysis (computer vision);
- Built automated reporting pipelines and laid the foundations for business intelligence;
- Continued my collaboration with Conio Inc as an external contractor, after being an employee;
- Open source contribution and development of personal projects from the ground up.

Main technologies: Python, Javascript, InfluxDB, Postgres, Docker, MQTT, OpenCV, Git

Backend developer, *Conio Inc* 12/2023 – 04/2025 | Italy

- Developed microservices in Python and Golang to improve existing products and build new features;
- Forked and extended the open source serverless-offline library to improve Lambda local layers and support custom Docker images, enabling local development and debugging for legacy microservices that previously could only be debugged on the staging environment;
- Improved code quality, efficiency and build processes, introducing Golang where it fit and multi-stage Docker builds for a large project;
- Onboarded and mentored new colleagues, both senior and junior.

Main technologies: Python, Golang, gRPC, Kafka, Docker, Serverless, Postgres, Redis, Git

Backend developer, *AdKaora srl* 04/2023 – 11/2023 | Italy

- Improved data ingestion from heterogeneous sources, resulting in a 30% speed increase and a 50% cost reduction;
- Maintained and developed new features of the company's core API (Python - FastAPI);
- Developed from scratch a Python web scraper to test a proprietary JS library implementation on clients' websites, which uncovered new bugs and allowed other developers to release new features more easily.

Main technologies: Python, FastAPI, MongoDB, Redis, Docker, AWS SQS, AWS Lambda, AWS API Gateway, AWS Step Function, Git

Backend developer, *Neosperience spa* 10/2022 – 03/2023 | Italy

- Maintained and developed new features of an auction system for the United Nations in Python and Django, following a TDD approach;
- Developed an economics tracker for the auctions, processing data such as auction location worldwide, involved partners, taxes and item costs, and producing Excel reports that users could download.

Main technologies: Python, Django, Django Rest Framework, Postgres, Docker, Git

Full stack developer, *Olab srls* 02/2019 – 09/2022 | Italy

- Developed a CMS with Python and Django (backend) and Javascript (frontend), used to create and edit the pages of a Shopify headless ecommerce;
- Developed a Shopify headless ecommerce, taking care of Shopify's integration both on backend and frontend;
- Developed a frontend framework on top of ExtJS to build single page web applications from XML configurations, used to display large amounts of data;
- Developed a Convolutional Neural Network during my internship to recognize 3 human emotions from webcam images, reaching about 70% accuracy.

Main technologies: Python, Django, Postgres, Redis, Docker, Javascript, ExtJS, HTML, CSS, jQuery

Skills

Python — 8+ years; REST/RPC APIs and microservices | Django and Django Rest Framework (4+ years), FastAPI | Data ingestion/manipulation systems, automated reporting pipelines and web scrapers | Libraries both from scratch and from data scientist work.

Engineering — Testing with a TDD approach | Performance improvements, best experience: refactored a data ingestion system leading to a 50% cost reduction and a 30% ingestion speed increase | SOLID principles and best practices like dependency injection, state machines, etc.; mostly DDD approach | Created templates to bootstrap new projects for various languages/frameworks.

Data & infrastructure — Postgres, MongoDB, Redis | Docker (including multi-stage builds), Git | Kafka, gRPC, AWS (Lambda, SQS, API Gateway, Step Functions) | Linux (NixOS).

Go — Refactored Python projects to Golang during a company transition period | Set up project's common utilities like loggers, AWS Lambda integration, code generation from OpenAPI 3.0.

Javascript/Typescript — Created a visual regression tester web app, publicly available on my GitHub, entirely in Typescript | Forked and improved the serverless-offline project by adding custom Docker image support and improving local layers | Developed web applications during my full stack experience, mainly frontend side, with jQuery and ExtJS.

Projects

Bootstrap-python-project, *Bootstrapping a Python project with the latest technologies*
Tested the latest technologies to configure a Python project. Using Devbox, uv, Ruff, Pyright and pre-commit brings development to a whole new level, with easily reproducible environments, a super fast linter/formatter/static checker and versionable git hooks.

PR, *Devbox*
Open source contribution: updated the documentation of Devbox.

Walle, *BTC Wallet*
Developing a Bitcoin wallet in Zig with some friends/colleagues, to study Bitcoin and the Zig language. The repository is on my GitHub.

Conda-autoactive-env, *Bash script*
A simple script that automatically activates/deactivates the Conda environment when entering the project directory.

Education

Mercatorum, *IT Engineering - BA* 08/2024 – present | Italy
Currently studying

Readings present
Currently reading Antonopoulos' "The Internet of Money" book.
Just finished Firefish's "The Ultimate Collateral" book.
Recently read Sam Williams' "Free as in Freedom: Richard Stallman's Crusade for Free Software" book.

Languages

Italian — Native/Bilingual

English — Fluent