Emanuele Parrella

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Education

Politecnico di Torino — Torino, Italy
B.Sc. in Management Engineering (L-8); planned M.Sc. in Software Engineering — *Expected 2027*

- Relevant coursework: Computer Science in Python (30 cum laude), Object-Oriented Programming in Java (29/30), Operations Research (28/30), Databases, Web Applications, Computer Networks

ITIS Galileo Galilei — Imperia, Italy
Technical High School Diploma in Computer Science: networking, Java and C++ programming — *2023*

Experience

Freelance Web Developer & Digital Strategist — Mar 2025 – Present
Self-employed, websites and online advertising for local small businesses — *Torino, Italy*

- Built and launched 6 client websites (HTML/CSS/JS, WordPress), including hosting and DNS setup
- Set up Local SEO and Google Tag Manager tracking of calls and WhatsApp clicks on every site
- Ran a dedicated Google Ads campaign (Search, Performance Max) for each client, measured on tracked leads

Projects

Project Nexus: Self-Hosted Homelab | *Python, FastAPI, Next.js, PostgreSQL, Docker* Oct 2026 – Present

- Run a Proxmox / Debian 13 home server where every service is a Docker container behind a Traefik reverse proxy; nothing is exposed to the internet, all access goes through the Tailscale VPN
- Gave each service an HTTPS subdomain of my own domain: Porkbun DNS points to private Tailscale IPs and Let's Encrypt certificates are issued via DNS-01, with no inbound ports
- Hardened every container (non-root user, read-only filesystem, no Linux capabilities), isolated each database on a private network and wrote 600+ pytest tests run before each deploy
- Built Fin-Engine, a finance and time-ROI tracker: FastAPI + PostgreSQL API and Next.js dashboard
- Built Transcriber, an audio-to-text service (FastAPI, FFmpeg, Groq Whisper) used from a web UI and a Telegram bot, with automatic failover to a backup provider
- Built Quiz-Engine, a study PWA with AI-generated quizzes and spaced repetition; now building Ads Automator, which reads each freelance client's Google Ads metrics via OAuth2

Shift-Scheduling Web App | *Next.js, TypeScript, Prisma, PostgreSQL, Vercel* Oct 2026 – Nov 2026

- Deployed a monthly shift planner used in production by a care home, with automatic hour totals
- Automated staffing rules (rest after night shifts, holiday rotation), CSV export and database backups

Animal Shelter Platform (university project) | *PHP, MySQL, JavaScript, React* 2026

- Built an adoption and volunteering web app: PHP JSON API, JavaScript forms and a React gallery
- Implemented password hashing, CSRF tokens, prepared statements and locks against double bookings

Skills

Programming: Python, TypeScript, JavaScript, Java, PHP, SQL, HTML/CSS

Frameworks & Data: FastAPI, Next.js, React, Prisma, SQLAlchemy, PostgreSQL, MySQL, pytest

Infrastructure: Docker, Traefik, Proxmox, Linux (Debian), Tailscale, Git, Vercel

Web & Marketing: Google Ads, Google Tag Manager, Local SEO, WordPress

Languages: Italian (native), English (B2, IELTS in progress)