

My name is Simone Bitti, and over the past years I have grown as a software engineer both within structured corporate environments and through personal projects that allowed me to experiment with cutting-edge technologies and methodologies. My approach is driven by curiosity and the desire to build real, valuable solutions that address user and business needs.

Main Professional Experiences:

At Vodafone, as a Senior Software Engineer, I have worked on AI platforms like TOBi and Agent Assistant, developing chatbots and support tools to enhance both customer experience and internal team effectiveness. These roles strengthened my ability to collaborate in multidisciplinary teams, tackle complex challenges proactively, and constantly strive for improvement.

In parallel, I have dedicated myself to the full-cycle development of personal projects. These have allowed me to explore end-to-end product design and delivery. Below, I describe them with technical depth:

Quizzify

<https://quizzify.eu>

Quizzify was created to make learning more engaging through automatically generated quizzes based on online content or PDF documents. I designed the whole system, handling both frontend and backend development:

- **Frontend:** Built with React, TypeScript, and TailwindCSS to provide a modern and responsive interface.
- **Backend:** Developed in Python using Flask and REST architecture, managing user requests and integrating with AI workflows.
- **Quiz Generation:** Leveraged Azure OpenAI language models and orchestrated them using Langchain and LangGraph to produce personalized and high-quality quizzes.
- **DevOps Pipeline:** Automated deployments with Azure App Service and Azure Pipelines.
- **Authentication and Data Storage:** User management and progress tracking via Firebase (Firestore).

I personally focused on prompt engineering, monitoring question quality, and refining the user experience. I implemented features to allow users to track their progress and review their mistakes intuitively.

Parallax

<https://parallax.chat>

Parallax is a platform designed to stimulate personal reflection and constructive dialogue with AI agents representing Opposite, Neutral, and Empathetic viewpoints.

- **Frontend:** Developed in Next.js, React, and TailwindCSS for a smooth, device-independent experience.
- **Backend:** Implemented with Python and Flask.

- **Conversational AI:** Used Langchain for orchestrating conversational flows, and LangGraph for asynchronous multi-agent interactions.
- **Realtime:** Utilized WebSocket to enable seamless, real-time conversations between users and AI agents.
- **Deployment & DevOps:** Data persistence with Firebase Firestore, deployment on Azure App Service, and CI/CD with Azure Pipelines.

I designed the AI agent prompts to give each a unique personality and point of view, and worked extensively on UX to encourage users to engage in deep self-reflection through dialogue with alternative perspectives.

Ask My CV

Ask My CV is an experimental project that transforms a traditional CV into an interactive knowledge base, enabling exploration of professional skills through a chatbot. My goal was to go beyond a simple skills list and enable dynamic, verified exploration using advanced AI techniques:

- **Extraction and Enrichment Pipeline:** Used OCR to parse PDF pages, convert to HTML, and summarize/enrich content with LLMs.
- **Semantic Indexing:** Employed embedding and chunking for efficient and accurate retrieval.
- **Knowledge Graph:** Created a Neo4j-based knowledge graph to support advanced queries and contextual answers.
- **Conversational AI:** Managed the conversational pipeline with Langchain and state using LangGraph.
- **RAG (Retrieval-Augmented Generation):** Combined graph and embedding search to ensure accurate, source-grounded answers.

I handled every phase, from integrating parsing modules and AI to building the graph database and frontend in React for interactive exploration.

These experiences taught me the value of resilience, creativity, and continuous improvement. I am a proactive learner, enjoy sharing knowledge, and thrive in collaborative environments. I believe the best solutions arise from the cross-pollination of skills, open dialogue, and the courage to experiment.