

# Denis Craciun

Software & AI Engineer | +393246014086 | deniscraciun18@icloud.com | [LinkedIn Profile](#) | [GitHub](#)

## PROFESSIONAL SUMMARY

AI Engineer with 3+ years of software development experience, merging a BSc in Computer Science with an ongoing remote MSc in Finance (UK). Specializes in Agentic RAG systems and QLoRA fine-tuning within AI R&D, delivering production-grade solutions like in-house Bitcoin Lightning integrations. Combines deep technical expertise in Python and LangChain with financial acumen. Seeking an AI Engineer role to develop scalable, high-impact AI-powered products.

## EDUCATION

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| The Open University, <i>Master of Science in Finance</i> , Milton Keynes, United Kingdom | Oct 2025 - Oct 2027 |
| University Of Pisa, <i>Bachelor of Science in Computer Science</i> , Pisa, Italy         | Sep 2022 - Oct 2025 |

## WORK EXPERIENCE

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|---|---------------------|
| InnovYou, <i>Software &amp; AI Engineer</i> , Remote  | Mar 2023 – Present  |
| <ul style="list-style-type: none"><li>Architected and scaled microservices handling millions of payment transactions using Django, Node.js, and containerized infrastructure, optimized API response latency, enabling real-time financial data processing for 100K+ concurrent users.</li><li>Designed fault-tolerant microservice architecture with Docker, Kubernetes-ready deployments, and async job queues (Django-Q/Redis), achieving high stability across payment processing pipelines while handling 10K+ requests/second under peak load.</li><li>Designed cloud-native microservices architecture with composable integration patterns and cross-system connectors; implemented REST/JSON APIs with OAuth2 security and real-time data synchronization, reducing integration latency while enabling modular tool orchestration across enterprise systems.</li><li>Led AI R&amp;D initiatives by implementing agentic RAG pipelines, QLoRA fine-tuning and MCP, improving chatbot retrieval accuracy and significantly reducing model hallucinations whilst reducing costs thanks to open-source models.</li><li>Refactored legacy codebases to modern TypeScript and encryption, reducing technical debt and accelerating feature releases.</li></ul> |                     |
| Abivet, <i>Software Developer Junior</i> , Remote   | Sep 2022 – Mar 2023 |

## PROJECTS

### Vivia – AI-Powered Tourism Chatbot

- Built production-grade serving backend for AI platform with LangChain and VectorDB, implementing request routing, context retrieval, and observability hooks for monitoring reliability and SLOs. Deployed self-serve capability enabling multiple teams to manage independent data pipelines and agents; optimized architecture for scalability under high concurrency.
- Implemented RAG and QLoRA fine-tuning with a scalable backend (LangChain, NLP, VectorDB, AI agents) enabling real-time merchant recommendations.

### DerpGPT – Conversational AI Model (From Scratch)

- Built and trained a 50M-parameter conversational language model on synthetic persona-based, multi-turn dialogue datasets using PyTorch only.
- Designed the full training pipeline and evaluated model behavior, highlighting challenges in coherence and context retention in smaller LLMs.

### Genetic Algorithm – Dot Navigation Simulation

- Created a visual demo showing how a genetic algorithm trains a swarm of agents to navigate toward a goal.
- Implemented evolutionary logic (fitness, selection, mutation) using pure HTML and JavaScript.

### Qubit Simulator – Visual Quantum Computing Simulation

- Built an interactive qubit and quantum gate simulator using Python and Pygame with real-time state visualization.
- Enabled hands-on exploration of quantum state changes to illustrate core quantum computing principles.

## CERTIFICATES AND QUALIFICATIONS

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| Quantitative and Qualitative Research in Finance | Oct 2025 |
| English C1 Level                                 | Apr 2021 |

## SKILLS

**Languages:** TypeScript; Python; C; Java; SQL; Assembly ARMv7; OCaml

**Frameworks:** React; Angular; Django; FastAPI; Flask; Node.js; Next.js; Flutter; Springboot; Wordpress; Figma;

**AI & Agents:** Agentic RAG; LangChain; Huggingface; MCP (Model Context Protocol); VectorDB (Pinecone/Chroma); QLoRA Fine-tuning; PyTorch; NLP; Hallucination Mitigation; ETL pipelines; Model Evaluation

**Cloud & DevOps:** Docker; AWS (S3/EC2 concepts); Git; Observability & monitoring; NoSQL; RESTful API design; Jira;