Top Skills Anthropic Claude Pinecone Qdrant

### Certifications

Bioinformatics with Python Build Python Web Apps with Django Skill Path Introduction to Prompt Engineering for Generative AI

Spark for Machine Learning & AI

Artificial Intelligence Developer @ Activate Intelligence | Large Language Models (LLM), GenAl London, England, United Kingdom

## Summary

An experienced software engineer with a strong background in fullstack development, data science, and cutting-edge AI technologies. Holding a Master's degree in AI, I specialise in advanced language models like GPT-4, Claude AI, and LLaMa, with expertise in natural language processing, prompt engineering, and vector embeddings. Skilled in translating natural language questions into Neo4j's Cypher query language for graph databases.

Proficient in leveraging cloud services (AWS, Azure), data streaming tools (Confluent Kafka), and database management (SQL, MongoDB) to build scalable and efficient applications. Adept at frontend frameworks (React.js, Next.js) and back-end technologies (Django, Flask, FastAPI) for developing robust web solutions.

Recent projects include leading the development of an AI-powered rich text editor using Next.js, TypeScript, and language models, as well as implementing Retrieval Augmented Generation (RAG) and voice interaction APIs like Amazon Polly and Eleven Labs. Proven ability to deliver comprehensive, integrated AI solutions built on a solid full-stack development foundation.

A lifelong learner dedicated to staying current with AI advancements through workshops and collaboration. Committed to knowledge sharing and driving impactful results, leveraging technical expertise and problem-solving abilities honed across various domains, from avionics to startup environments.

## Experience

Activate Intelligence Artificial Intelligence Developer January 2024 - Present (8 months) London, England, United Kingdom • Specialised in cutting-edge AI models including GPT, Claude AI, LLaMa, and LangSmith, demonstrating exceptional capabilities in model customization, fine-tuning, and seamless integration into AI-driven applications, enabling significant enhancements and optimizations.

• Led the development of a rich text editor web app using Next.js, TypeScript, Tailwind CSS, and WYSIWYG editor (Quill), integrating large language models (GPT-4, Claude-3) via APIs to manipulate text within the editor.

• Designed an approach to convert natural language questions into Neo4j queries using function calling technique that LLMs provide, enabling users to query the graph database using specific and general questions.

• Focused on prompt engineering using LangChain and EmbedChain, optimising AI prompts for efficiency and accuracy, resulting in improved model responsiveness and output quality.

• Implemented Retrieval Augmented Generation (RAG) to augment generative models with information retrieval, significantly improving the relevance and applicability of AI-generated content.

• Managed vector search operations using vector databases like Pinecone and Qdrant, enhancing the system's ability to handle complex queries and large data sets effectively.

• Utilised Neo4j graph database and Cypher Query language for handling complex data relationships, thereby improving data integrity and relationship mapping in AI applications.

• Experienced with text-to-speech APIs like Amazon Polly and Eleven Labs, producing high-quality audio content for virtual assistants and automated customer support systems.

• Knowledgeable in cloud services (AWS, Azure) and database management (MongoDB), providing efficient data storage solutions ensuring high availability and scalability of AI applications.

• Utilised Confluent Kafka for robust data streaming and processing, supporting large-scale system efficiency and reliability in real-time data handling.

ORCAs Informatica Full Stack Engineer June 2020 - December 2023 (3 years 7 months) London, England, United Kingdom

- Proficient in Python, Javascript, React JS, Typescript, and Tailwind CSS.
- Experience in Django and Flask frameworks for building web applications.

- Developed Rest APIs (Django Rest Framework) for communication between front-end and back-end.

- Strong knowledge of SQL for database management and optimization (MySQL, MongoDB, PostgreSQL).

- Experience with working in an agile environment, utilizing agile methods.

- Developed applications that incorporate deep learning or machine learning models to enhance functionality and improve user experience.

- Experience in data science techniques, including data analysis, data visualization, and statistical modelling.

#### Popdot

Data Scientist February 2022 - May 2022 (4 months) Milan, Italy

\*A Sextech Startup\*

- Analyzed user data using Python libraries for collection, manipulation, and visualization.

- Improved device UX through data-driven enhancements, resulting in increased user satisfaction.

- Developed and maintained ETL pipelines, optimizing data processing efficiency.

- Collaborated cross-functionally to design and implement data solutions, contributing to enhanced operational efficiency.

- Implemented machine learning models, leading to improved product performance.

- Addressed complex data challenges with strong problem-solving skills, achieving high accuracy in predictive models.

- Collaborated with engineering for seamless integration of data science solutions.

#### Aselsan

Software Engineer Intern July 2018 - August 2018 (2 months) Ankara, Türkiye

ASELSAN A.Ş. – Akyurt Facilities MGEO (Microelectronics, Guidance and Electro-Optics) Avionics Software Design

Teamwork: Worked in a team of 2 tech professionals, learning constantly from them and striving to make an impact on the organisation as a whole.

Developed an application transferring data packets using UDP/IP, which was developed before with TCP/IP protocol, to help users communicate with binary, hexadecimal, decimal number and string expressions in half the time using C#.
Developed a full-stack application for the engineers and managers to distribute and control their work plans and set-up days in the company to save them a lot of time using C# and MongoDB.

#### ARD GRUP

Software Engineer Intern July 2017 - August 2017 (2 months) Ankara, Türkiye

Interpersonal skills: I was approachable and helped develop a positive attitude towards challenges

Conducted both front-end and back-end development for a website using ASP.NET MVC framework, Bootstrap, C#, JavaScript, HTML, CSS, and SQL Server Database.

# Education

Queen Mary University of London Master of Science - MSc, Artificial Intelligence · (September 2021 - September 2022)

### Erciyes Üniversitesi

Bachelor of Science - BS, Computer Engineering · (September 2015 - June 2019)

Wyższa Szkoła Kultury Społecznej i Medialnej w Toruniu Bachelor of Science - BS, Information Technology · (September 2016 - February 2017)