

Yuvan Chikka

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EDUCATION

Queen Mary University of London

Bachelor's of Science in Computer Science

London, UK

Sept. 2025 – June 2028

Sutton Grammar School

A-Levels (4 A's in Maths, Further Maths, Physics and Electronics) and GCSEs (nine 9s, two 8s and a 7)*

London, UK

EXPERIENCE

Founding AI Engineer

1soul.ai

Jan 2025 – Present

London, UK

- Developed whatsapp bot logic (FastAPI based and through Twilio API)
- Worked on persona representation (and logic to update personas) and simulated interactions between personas in custom environments.
- Worked using CI/CD through Github Actions.

AI + Data Analytics Intern

SAV Group

Jun. 2025 – Aug. 2025

London, UK

- Built dashboards (Django based backends) for lead management, unifying several tools (including several messaging services and Monday.com).
- Worked on scripts for area-based pricing prediction which were used as part of an evaluation of several planned acquisition locations.
- Built a RAG-based chatbot for fiftyonelondon's lead generation, designed to be able to be integrated both on the website and as a Whatsapp assistant for sales representatives, hosted remotely on an AWS instance.
- Functioned as a tech project lead and took charge of development, including briefly managing the website specific developers.
- Built documentation for all tools, and GUI interfaces for all backend-only interfaces created.

Founding AI Engineer

ReadyTraderOne

May 2024 – Aug. 2025

London, UK

- Built order book simulations based on multiple asset classes (including crypto, FX, fixed income and commodities)
- Built main interface, using a Django backend hosted on an EC2 instance and redis.
- Designed multiple 'scenarios' for educational trading simulations to happen within.
- Developed bots using standard trading strategies (including grid trading and mean reversion) but also built bots trading while attempting to influence stocks via chat messages and using qualitative news articles to make trading judgements.

AI Engineer

Propmoolah

Sep. 2024 – Mar. 2025

London, UK

- Improved the whatsapp service (using Fastapi and twilio), decreasing the average interaction time by over 60% by replacing a menu based interaction with an NLP2SQL pipeline
- Built automated aggregators of government and Rightmove+Zoopla housing data to a bigquery table, automating updates using cron jobs.
- Worked on house price forecasting based on area and past trends, using time series models.
- Created a google docs bot for generating urban planning documents for given areas using gpt to gather relevant sources then doing manual analysis, before generating content section by section and checking for text flow. This bot lead to the Propmoolah team getting investment from people representing the largest urban planning company in the USA, and the company's subsequent relocation.

AI Engineer

Venu.ai

Jan. 2024 – May 2024

Remote

- Improved scraping success rate by 15% by the creation of a custom webscraping bot, leading to noticeable benefits for lead aggregation.
- Implemented a template based system where the best templates were automatically selected and filled in for each chosen prospect, forming an email draft to review and send automatically. This greatly improved the average generated email quality as the LLM's job was easier.
- Designed a pipeline using Azure to scale the process to run on a cluster and with greater data validity checks.

Full stack engineer

Freelance (various)

Aug. 2018 – Feb. 2023

Remote

- Built full stack sites - mostly using Django, and mostly for internal use for inventory management.

RESEARCH

Private Is Not Privileged | *Mechanistic Interpretability, Qwen, Mistral, Python*

Aug. 2026

<https://apartresearch.com/project/private-is-not-privileged-18om>

- Investigated whether activation-based predictors provide genuinely privileged information about LLM actions over matched external baselines, separating representational decodability from comparator and information-boundary effects.
- In a 40-game Diplomacy experiment, found an apparent white-box advantage reversed when the text observer received matched post-deliberation information (Brier score: 0.103 activation vs. 0.033 text); audited robustness across model families, activation timings and reader classes.

GraftLoyal | *Mechanistic Interpretability, PyTorch, Transformers, Qwen*

Jul. – Aug. 2026

<https://apartresearch.com/project/graftloyal-a219>

- Constructed a context-sensitive secret-loyalty model organism in frozen Qwen2.5-1.5B-Instruct using activation-space detectors and gated residual-stream interventions at inference time.
- Built a 19-stage reproducible workflow with pair-swap controls, causal intervention tests, sealed validation, temporal-transfer checks and robustness/stress testing.

RiskLab | *AI Safety Evaluation, Python, Hugging Face, LLM Evaluators*

Jan. 2026

<https://apartresearch.com/project/risklab-w0fy>

- Built a risk-conditioned AI evaluation platform combining structured behavioural metrics, cross-framing/model comparisons, rule/ML/LLM evaluators, provenance and audit trails, and human escalation to study manipulative behaviour without relying on a single evaluator.

PROJECTS

LongVideo RAG | *Python, Whisper, CLIP, Ollama, SQLite*

May 2026

<https://github.com/Ultraviolet-Chikorita/videorag-local>

- Built fully local multimodal question answering over full videos using FFmpeg segmentation, faster-Whisper transcription, CLIP frame retrieval, local vision captioning, SQLite indexing and Ollama generation.
- Implemented temporal and cross-video evidence retrieval plus a web UI returning grounded answers with playable timestamped source clips; demo indexes 43 segments across three full videos.

TransitAssist | *Django, SQLite, JavaScript, Google Maps API*

Aug. 2024

https://github.com/Ultraviolet-Chikorita/TransitAssist_1

- Built a full-stack accessible public-transport planner with interactive routing and community reporting of accessibility barriers and successful accessible journeys.
- Implemented Django/SQLite data and user flows and substantial frontend/map integration in a three-person team, surfacing route-level accessibility information during journey planning.

CERTIFICATIONS

AWS Certified AI Practitioner

Amazon Web Services

AI/ML, generative AI and foundation-model applications on AWS, including prompt engineering, model evaluation, responsible AI, and security/governance.

Technical AI Safety

BlueDot Impact

Technical AI safety across alignment and RLHF, mechanistic interpretability, scalable oversight, evaluations and red-teaming, and AI control.

Deep Learning Specialization

DeepLearning.AI / Coursera

Five-course specialization in deep neural networks, optimization and regularization, ML strategy, CNNs, RNNs/LSTMs, attention, and Transformers using Python and TensorFlow.

Natural Language Processing Specialization

DeepLearning.AI / Coursera

Four-course specialization from vector-space and probabilistic NLP through RNNs/LSTMs/GRUs and Transformers, applied to sentiment, NER, translation, summarization, and question answering.

Mathematics for Machine Learning and Data Science

DeepLearning.AI / Coursera

Linear algebra, calculus, probability and statistics for machine learning, with Python-based work on optimization and statistical reasoning.

IBM Data Science Professional Certificate

IBM / Coursera

End-to-end data science with Python and SQL: data wrangling, visualization, relational databases, scikit-learn machine learning, and an applied capstone.

Additional certificates: Harvard CS50W – Web Programming with Python and JavaScript; Natural Language Processing with Classification and Vector Spaces – DeepLearning.AI / Coursera.

TECHNICAL SKILLS

Languages: Python, JavaScript, SQL (PostgreSQL, MySQL, SQLite), C/C++, Java, HTML/CSS

ML / AI & Safety: PyTorch, TensorFlow/Keras, Hugging Face Transformers, scikit-learn, LangChain, CLIP, Whisper, spaCy, PyRIT, RAMPART

Web / Data: Django, FastAPI, Flask, SQLAlchemy, Pandas, NumPy, SciPy, Matplotlib, Plotly, Folium

Cloud / DevOps: AWS, Azure, Google Cloud Platform, Docker, GitHub Actions, Git, Linux