Tianxiang Song (Michael) 🔗 in

Address London, UK   **Mobile** +44 7511820745   **Email** stx666michael@gmail.com

---

Profile

A MSc graduate with strong background in Computing and AI. Passionate about software engineering and data analysis, with solid experience in machine learning, mobile development and web programming.

Skills

Areas of Expertise: Computer Vision, Natural Language Processing, Mobile Application (iOS), Web Application, Robotic Process Automation, Deep Learning

Programming Languages: Python, Java, Swift, C, C++, HTML, CSS, JavaScript, Haskell, MATLAB

Tools and Services: Linux, SQL, Xcode, VS Code, Unity, Flask, Django, React (Native), Node.js, Docker, Git, AWS, WebSocket, FastAPI, UiPath, Adobe Suite, MS Office.

Education

Sep 2023 - Sep 2024
Imperial College London   *Distinction*
MSc Computing (Visual Computing and Robotics)

Sep 2019 - Jul 2023
The University of Nottingham   *First Class*
BSc Computer Science with Artificial Intelligence

Experiences

Apr 2025 - Present
Air Aware Labs   *AI Scientist*
- Developed route optimization algorithm to reduce exposure to air pollutants.
- **Skills**: Data Analysis, Machine Learning, Reinforcement Learning, Route Optimization

Jan 2025 - Mar 2025
Visualist   *Machine Learning Intern*
- Fine-tuned image inpainting models for object removal, aligning with target user's needs.
- Dockerized and deployed image generation models for mask/prompt based editing.
- **Skills**: Deep Learning, Computer Vision, Image Processing, Generative AI, Docker, FastAPI

Dec 2024 - Jan 2025
Blitzo   *Software Engineer Intern*
- Enhanced and maintained mobile and web applications for a delivery booking platform.
- Implemented functions that allow users to book multiple active orders, improving operation efficiency.
- **Skills**: TypeScript, React, React Native

Dec 2024 - Present
Outlier   *AI Trainer (part time)*
- Optimized LLMs for coding expertise regarding instruction following, truthfulness and verbosity.
- Conducted Python code reviews for correctness and efficiency.
- **Skills**: Prompt Engineering, Large Language Models, Python, Code Review

Projects

Jan 2024 - Sep 2024
OCR Applied to Modern Literature   *Dissertation*
- Developed OCR models to extract text from historical Chinese documents in modern literature.
- Proposed synthetic data generation process to address the lack of training data.
- **Skills**: Computer Vision, OCR, Synthetic Data Generation, Deep Learning, Python.

Jun 2022 - May 2023
Guided Assembly with Augmented Reality   *Dissertation*
- Developed an AR tutoring system as an iOS application to assist manual assembly tasks.
- Trained and integrated deep learning models for instruction automation based on step completion.
- **Skills**: Computer Vision, Augmented Reality, 3D modelling, SLAM, UX, UI, Xcode, Swift.

Jun 2022 - Aug 2022
Document Text Recognition   *Researcher*
- Implemented and applied state-of-the-art image denoise methods to camera-taken documents.
- Proposed a table recognition algorithm for organizing recognized text in tabular format.
- **Skills**: Computer Vision, Image Processing, Deep Learning, OCR, Python.

Oct 2021 - May 2022
Codenames - Game AI   *Technical Lead*
- Emulated the *Codenames* board game as a web application and deployed it in web servers.
- Implemented AI players using NLP techniques.
- Implemented client-server communication and multiplayer synchronization.
- **Skills**: HTML, JavaScript, Flask, AWS, Git, Natural Language Processing, Team Management.

Jun 2021 - Oct 2021
Trademark Retrieval Tools   *Researcher*
- Built a software collaborated with Ningbo Customs for validating trademarks on a given picture.
- Fine-tuned deep neural networks (such as *ResNet50*) on large datasets like *Logo-2K+* as feature extractor.
- Proposed a trademark retrieval algorithm.
- **Skills**: Computer Vision, Deep Learning, Python.