# XINJIAN WU

# **EDUCATION**

# • University College London

Sep 2024 - Present

MSc Computer Science

London, UK

• Main Courses: Software Engineering, Applied Deep Learning, AI and Neural Computing

## University College London

Sep 2021 - Jul 2024

BSc Mathematics with Economics

London, UK

- Graduated with First Class Honours
- Main Courses: Combinatorics and Optimisation, Measure Theory, Decision and Risk, Game Theory

# **WORKING EXPERIENCE**

Leyo Game [ )

Jul 2023 - Sep 2023

Game Programmer/Developer

Guangzhou, China

- Developed a custom Shop class to simulate purchasing dynamics within Shop Street feature
- Awarded Top 10 free iOS games in Japan/Korea and Top 20 free iOS games in the US

# **PROJECTS**

• EdgePLM

Oct 2024 – Present

- Programmer

  Tools: [Java, C++]

  Developed an Android application for on-device execution of LLMs using the **PowerInfer** framework.
- Converted the EdgeLLM model to the **gguf** format and Compile the model using the **TVM**.
- Wrote the **Model Architecture** for **llama.cpp**, **MLC-LLM**, and **PowerInfer** frameworks.
- Deployed the EdgeLLM model to **Space-Jetson** devices and Android platforms utilizing **llama.cpp**.

## CodeMind Framework

Oct 2024 – Present

Programmer

Supervisor: Prof. Earl Barr

- Designed a framework for generating code-based documentation to visualize codebase structure
- Developed a tool to represent relationships between code and classes using vector-based structures.
- Evaluated the performance of **AI code completion and generation accuracy** in prototype systems.

### • Market Risk Measurement

Feb 2024 - Mar 2024

Data Analyst

Tools: [R]

- Constructed a asset portfolio from FTSE100 and S&P500 with certain weighting
- Estimated 99% and 95% Value-at-Risk using Monte Carlo simulations and Copula theory
- Evaluated the ChatGPT for the performance of sentiment analysis on financial prediction

# Rumour Spreading in Social Networks

May 2023 - Jul 2023

Researcher

Tools: [R]

- Performed comprehensive quantitative analysis of the Daley-Kendall (DK) and Maki-Thompson (MK) models to investigate the dynamics of rumour propagation in social networks.
- Investigated the application of these models to **gossip algorithms** for information dissemination.
- Utilized the DK and MK models to analyze the interactions and roles of **ignorants**, **spreaders**, **and stiflers**, providing insights into the complex processes governing rumour propagation.

#### SKILLS

- **Programming:** Python, C++, Java, C#, R, JavaScript/TypeScript
- Frameworks & Libraries: PyTorch, TensorFlow, scikit-learn, Pandas, NumPy
- Web & Frontend: Vue, React, HTML, CSS
- Tools & DevOps: Git, Docker, Shell
- Mathematical Tools: Mathematica, MATLAB
- Game Engines: Unity, Godot