

# Weilue Luo

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## Education

### University College London

COMPUTER SCIENCE (DISTINCTION - AVG. 85%)

London, UK

Sep. 2021 - Sep. 2022

### University of Manchester

COMPUTER SCIENCE (DISTINCTION - AVG. 83%)

Manchester, UK

Sep. 2018 - Sep. 2021

### Bellerbys College

FOUNDATION - COMPUTING (1<sup>ST</sup> IN COHORT - AVG. 84%)

Brighton, UK

Jan. 2018 - Jun. 2018

## Skills

### Programming

(>10k lines) Java, Python, HTML/CSS, Typescript/Javascript; (>2k lines) C#, Matlab, C, GLSL.

### Tech Stack

Lombok, Guava, Jackson, Hadoop, Hamcrest, Spark, ReactJs, ThreeJs, NextJs, SASS/SCSS, Pytorch, Numpy, Matplotlib, NodeJs.

### Environment

Git, CR, AWS, Scrum, Markdown, Unix, latex, VSCode, JetBrains'.

### Language

(native) Chinese and Cantonese; (fluent) English; (beginner) Japanese.

## Experience

### NoGhost

MACHINE LEARNING ENGINEER - PYTHON

London, UK

Jun. 2022 - Sep. 2022

- Part of Master's degree project at UCL, condensed a thesis which highly-rated by engineers and professors.
- Built multi-threaded machine learning data pipeline from scratch, improved and implemented a number of state-of-the-art ML papers that aids artists' development process.

### Amazon - Alexa

SOFTWARE ENGINEER INTERNSHIP - JAVA

Cambridge, UK

Jun. 2021 - Sep. 2021

- Built and embedded an experiment framework into the existing question-answering pipeline. Conducted experiments with 1% customer traffic, and presented a highly-rated proof-of-concept report.
- Developed an efficient workflow for future experiments, and reduced experiment deployment time needed from days to hours.
- Received full-time offer.

### Amazon - Item Safety

SOFTWARE ENGINEER INTERNSHIP - JAVA

Edinburgh, UK

Jun. 2020 - Sep. 2020

- Developed procedures that aggregate ≈3 billion item records into concise datasets daily using tools based on Spark. Built an effective modern visualization dashboard with these datasets using Elastic Search and Kibana.
- Developed an API package for automating the creation of visualization components and dashboards.
- Received full-time offer.

## Selected Projects

### Collaborate Live

LEAD DEVELOPER - HTML/CSS, AND JAVASCRIPT

Manchester, UK

Jan. 2019 - Mar. 2019

- Led a team of 7 students to build a web application for a code-based interview.
- Awarded 1<sup>st</sup> place in most appealing idea and highest technical quality prize out of 37 teams.

### MP3 Music Player & Flight Management System

SOLE DEVELOPER - JAVA

Manchester, UK

Mar. 2019 - Jun. 2019

- A MP3 player with GUI and custom database, supports functionalities such as play, pause, restart, and upload custom songs.
- A flight management system with GUI and custom database, supports functionalities such as booking, reschedule, cancel and swap flights.
- One of three students who managed to complete this coursework over last 20 years.

### Machine Learning

SOLE DEVELOPER - PYTHON

London, UK

Sep. 2020 - Sep. 2022

- **Time Series Prediction:** Generate Monophonic and Polyphonic music. **Image Classification:** Transfer learning based on a pre-trained resnet. **Image Denoising:** Encoder-Decoder network that doubled PSNR compared to traditional techniques. **Others:** Implemented linear/polynomial/logistic regression; SVM, kSVM; clustering algorithms such as KMeans and Meanshift.

### Image Downloader

SOLE DEVELOPER - PYTHON

Manchester, UK

Jun. 2019 - Aug. 2019

- Designed and implemented an API supports automatic login, multithreading downloading, various format parsing and filter images, along with a graphical user interface. The project can be found at <https://github.com/Redcxx/Pikax>.