Weilue Luo

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Education

University College London   *London, UK*
COMPUTER SCIENCE (DISTINCTION - AVG. 85%)   *Sep. 2021 - Sep. 2022*

University of Manchester   *Manchester, UK*
COMPUTER SCIENCE (DISTINCTION - AVG. 83%)   *Sep. 2018 - Sep. 2021*

Bellerbys College   *Brighton, UK*
FOUNDATION - COMPUTING (1ST IN COHORT - AVG. 84%)   *Jan. 2018 - Jun. 2018*

Skills

Programming   (>10k lines) Java, Python, HTML/CSS, Typescript/Javscript; (>2k lines) C#, Matlab, C, GLSL.
Tech Stack   Java 8 Stream, Map Reduce, 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   *Jun. 2022 - Sep. 2022*
- Part of Master's degree project at UCL, condensed a thesis which highly-rated by engineers and professors.
- Built multi-processing data pipeline, improved and implemented state-of-the-art machine learning papers.

Amazon - Alexa SOFTWARE ENGINEER INTERNSHIP - JAVA   *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   *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

Personal Website HTML/CSS, TYPESCRIPT, and GLSL   *Jun. 2020 - Present*
- Written pages using reactJs, nextJs, threeJs, sass, postcss, pugJs and WebGL.
- Features include: (1) RSS feed backed by CORS proxy server deployed with AWS Lambda. (2) Automated integration using Github Actions. (3) 3D landing page built with React-three-fiber and custom shaders. (4) Responsive and modern CSS. (5) Search engine optimzation.
- Project can be found at https://github.com/Redcxx/personal-website.

Map Reduce Utilities JAVA   *Feb. 2020 - Mar. 2020*
- Developed programs for performing common tasks such as computing tfidf for large document database using Apache Hadoop's Map Reduce.

MP3 Music Player & Flight Management System JAVA   *Mar. 2019 - Jun. 2019*
- A MP3 player and flight management system with basic functionalities.
- One of three students who managed to complete this coursework within over last 20 years.

Propositional Logic Utilities JAVA   *Oct. 2019 - Nov. 2019*
- A tool for parsing and manipulating propositional logic formulas, supports conversion to normal forms, push negations, tautology and contradiction checks and truth table generation. Project can be found at https://github.com/Redcxx/PropositionalLogicUtils.

Image Downloader PYTHON   *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. Project can be found at *https://github.com/Redcxx/Pikax*.

Photographic Mosaic PYTHON   *Aug. 2019 - Aug. 2019*
- Built a multi-processing library for generating photographic mosaic, capable of processing and matching over 30k images within 3 minutes, supports various RGB-based and LAB-based color difference algorithms. Project can be found at https://github.com/Redcxx/Mosaic-Pics.

Collaborate Live HTML/CSS, and JAVASCRIPT   *Jan. 2019 - Mar. 2019*
- Led 7 students to build a web application for a code-based interview. Features include real-time coding, drawing, compliation and terminal.
- Awarded 1st place in most appealing idea and highest technical quality prize (2/4 prizes) out of 37 teams.