

Luer Lyu

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EDUCATION

University of Southern California

August 2021-May 2023

Master of Computer Science (3.85/4.0)

- Awards and Honors: Honors Program

University of Nottingham

September 2017-June 2021

Bachelor of Computer Science with AI (3.95/4.0)

- Awards and Honors: High Achiever Award (top 10) (2020), President Scholarship (top 2.5% of grade) (2018)

WORK EXPERIENCE

University of Southern California

August 2022-December 2022

Teaching Assistant

Los Angeles, United States

- Assisted the preparation of course Analysis of Algorithms, designed exam contents and held office hours

Factory 42

July 2021-September 2021

Software Developer

London, United Kingdom

- Developed a video conferencing app in Unity using C# with WebRTC and Render Streaming packages
- Deployed depth camera to catch image information and rendering the 3D image on Looking glass
- Implemented an assisting UI for the Augmented Reality project with Magic Leap One headset

Nottingham City Council

January 2020-February 2020

Front-end Programmer

Nottingham, United Kingdom

- Built a responsive website by using HTML, JavaScript, and CSS with Bootstrap framework, coordinated with the team using Trello to follow the Agile development method
- Developed the prototypes and increased accessibility and flexibility of the website

IDT SINYUAN Sealing Technology

July 2019-August 2019

Machine learning Research Member

Ningbo, China

- Created a website using Vue.js to automatize the process of transferring information from paper to excel and classifying data using a natural language processing model
- Utilized OCR to read scanned documents and experimented with RNN, LSTM algorithm and Bert to separate words in sentences and categorize the words
- Optimized the pipeline by developing a word segregation model, integrated the model as a pre-processing step and improved the accuracy by 6%

PROJECTS

COVID Vaccine Misinformation Analysis

September 2021-November 2021

- Led the project of experimenting different ways of topic modelling using Python on the corpus and getting informative results about campaigner groups from online post data to produce an information site for it
- Project website: <https://sites.google.com/usc.edu/covidvaccinemisinfo/home>

Bitcoin Price Prediction Using Spark

March 2021-May 2021

- Implemented the ETL process using Spark with Python and deployed it onto Azure Data Factory
- Responsible for building the pipeline to create model using PySpark and predict new results

Hanabi Card Game on Mobile Phone

September 2019-May 2020

- Steered a team of 4 to build a multi-player interactive card game for both iOS and Android system
- Conducted data analytics using REST API to send JSON data to cloud database and used Git to integrate works
- Produced the code for the main game logic, accomplished synchronizing players' data through internet with Socket Weaver API and exported the game with Unity and XCode

C++ 2D Roguelike Game Development

March 2020-May 2020

- Designed the game on OpenGL using C++
- Developed pseudo intelligent enemy characters, multiple levels, character selection and a score leaderboard

Java Frogger Game Development

October 2019-November 2020

- Implemented the game with JavaFX and Java utilizing MVC, Factory design patterns and wrote JUnit tests

SKILLS

Technical skills: Java, C/C++, C#, Haskell, HTML/CSS, JavaScript, PHP, SQL, MATLAB, Python, R, Apache Spark, Unity, Git, REST, Linux