

ASHLEY (YU-HSUAN) LU

Los Angeles, CA | 213-677-8425 | luyhsua@usc.edu | linkedin.com/in/yuhsuan-ashley-lu/ | GitHub: <https://yuhsuanlu.github.io>

EDUCATION

University of Southern California

August 2021-December 2023

Master of Science, Computer Science

USC Viterbi Engineering Scholarship for talented admitted students

- Relevant Coursework: Algorithms, System Design, Computer Network, Operating System, Web Search Engine, Artificial Intelligence, Machine Learning, Database, Game Development

National Taipei University of Technology

September 2014-June 2018

Bachelor of Science, Industrial Engineering and Management

Academic Award: Earned Presidential Award (Top 5% of Class)

- Relevant Coursework: Cloud-based Computing, Database Management, Automation, Website Design, VR/AR

WORK EXPERIENCE

Machine Learning Engineer Intern, Quantitative Risk Management

January 2023-August 2023

Shepherd Ventures, San Diego, CA

- Conducted web scraping of real-time data from multiple websites, and ensured accurate data retrieval via BeautifulSoup.
- Pre-processed and normalized collected dataset with Scikit-learn library, and built operational infrastructure and machine learning pipeline for quantitative model training, evaluation, testing, and deployment.
- Incorporated systems to track data through Long Short Term Memory and Recurrent Neural Network techniques.

Software Engineer

August 2019-May 2021

Wistron Corporation, New Taipei, Taiwan

- Enhanced automation tools via batch scripting, and optimized auto-generation scripts to visualize reports from databases.
- Maintained a robust testing environment, pioneering automated scripts, reducing manual test time by 15%.
- Collaborated with senior engineers in design and code reviews to manage system devices and BIOS errors via C/C++.

Software Engineer

July 2018-July 2019

Topone Information, Taichung, Taiwan

- Conducted backend development of complex Enterprise Resource Planning (ERP) web and application.
- Researched user needs to establish roadmaps and determine efficient solutions and required functionalities while partnering with UI/UX team members in pioneering novel features to transform the user experience and improve features.
- Directed and built tailored features into ERP systems, enabling efficient data retrieval and calculation for inventory management, procurement, and manufacturing management using SQL.

ACADEMIC PROJECTS

Maze Game (C#, Unity, Git)

June 2022-August 2022

- Transformed design specification into functional game algorithms and scalable code blocks via C# and Unity.
- Addressed bugs, resolved code merge conflicts, designed game levels, directed testing with C# scripts and Git.
- Devised UI/UX features, and assessed user feedback using data analysis to maximize usability and user experience.

Athena Hackathon (Python Flask frameworks, Azure, HTML5, CSS, JavaScript, Git)

February 2022

- Led full-stack design and software development of an interactive, mobile-friendly web application, integrating features such as combined chatbot, map integration, autocomplete, searching, and saved lists features.
- Implemented frontend frameworks of website using HTML5 and CSS features for enhanced user experience.
- Designed backend using Python Flask and integrated multiple APIs, including Google Maps for expanded functionality.
- Deployed web application on AWS, ensuring scalability and high availability.

Minesweeper Game Application (Java, Java GUI, System Design)

October 2021

- Leveraged system design skills and comprehensive test cases to code, debug, and display interactive GUI via Java.
- Implemented game logic, search algorithms to count adjacent mines, and user event handlers to handle user interaction.

SKILLS

Skills: Java, Python, C#, C/C++, Golang, Git, TypeScript, JavaScript, HTML, CSS, Bootstrap, JQuery, React, Python Flask, Node.js, SQL, MySQL, Postgres, .NET, Unity, Kubernetes, bash, Script, Selenium

Areas: Web Development, UI/UX, Full-Stack Development, Object-Oriented Programming, RESTful APIs, DevOps, Distributed Systems, Quality Assurance, Testing, Machine Learning, Artificial Intelligence, Agile Methodology, SDLC Methodology