

Yi Lyu

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EDUCATION

University of Illinois Urbana-Champaign, Champaign, Illinois

Master of Computer Science

Aug. 2021 – Dec. 2022

GPA: N/A

University of California, Los Angeles, Los Angeles, CA

B.S. in Mathematics of Computation

Graduating in June. 2021

GPA: 3.94 / 4.00

SKILLS & OTHERS

Programming: C++, Python, Javascript, SQL, AWS, Hadoop/Spark, OpenGL, CUDA, Linux

Web Development: Frontend Development, Node.js, React, Flask, Nginx, PostgreSQL

Computer Science: Operating System, Computer Graphics, Computer Vision, Algorithms, Database

Mathematics: Machine Learning, Linear Algebra, Numerical Analysis, Probability, Graph Theory

EXPERIENCES

Nokia, Hangzhou, China

SW Engineer Intern

Jul. 2019 – Sep. 2019

- Worked on log analysis toolchains in a distributed environment to boost development efficiency.
- Developed a **Python** tool that helps analyze tests in a **Continuous Integration** environment.
- Parsed and analyzed **C++** compiler logs and Gerrit log files with **Elasticsearch**.
- Implemented exception handlers for a module on 5G cells activation and wrote unit tests in **gMock**.
- Facilitated the test analysis for more than 70 software engineers.

Back-Bandaïd,

Web Developer

Mar. 2019 – Jun. 2019

- Developed Back-Bandaïd, a posture correction product, in a quarter-long Product Design course (ENG 002).
- Designed and built a web application with **Node.js** that supports account creation and order processing.
- Pitched in class for potential investment and ranked Top 3 across all sections.

PIC 40A, UCLA

Reader

Sep. 2020 – Dec. 2020

- Read and graded students' homework and quizzes in Web Application (PIC 40A).
 - Implemented an automatic grading tool for web application homework with **Selenium** and **Pytest**.
 - Reduced the estimated grading time for PIC 40A from 35 to 24 hours.
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PROJECTS

Image Stitching,

Create a panorama based on a video or several images

Jan. 2021 – Mar. 2021

- Created a web application with **Flask** that combine images with overlapping areas.
- Implemented it with SIFT, RANSAC, and image stitching given homography.

When Drones Attack, UCLA (CS 174A)

a TPS game based on **WebGL**

Jan. 2021 – Mar. 2021

- Created a TPS game where users need to protect their houses from the drones with energy bolts.
- Implemented features including collision detection, model gluing, and mouse picking from scratch.

Scytale, UCLA

A Python library for cryptography

Jan. 2020 – Jun. 2020

- Implemented a variety of algorithms and cryptographic systems and published it on PyPI.

BearMap, UC Berkeley (COM SCI 61B)

A mapping service project similar to Google Maps

Jun. 2018 – Aug. 2018

- Built a Java Web Mapping application that performs routing and graph traversal.