

# BURWIN LIU

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## Education

### University of California, Irvine

June 2022

Bachelor of Science, Computer Science

GPA: 3.94

**Relevant Coursework:** Algorithms and Data structures, Programming in Python, Programming in C++, Artificial Intelligence, Machine Learning, Information Retrieval, Computer Hardware and Organization

**Honors:** Dean's Honor's List (6 quarters)

## Skills

**Technical Languages:** Python, C++, C, JavaScript, Java

**Skills:** Data Structures and Algorithms, DevOps (CI/CD / GitHub Actions), Version Control (Git), Cloud Computing Technology (AWS), Linux/Unix, Relational Databases (MySQL, Postgres), Android Application Development, JavaScript Frameworks (React, Vue), Machine Learning (Computer Vision)

## Experience

### Schneider Electric Internship

July 2020 – August 2020

Intern

- Attended daily meetings with top executives, representatives and current employees
- Experienced and learned about Schneider's workflow, model and future direction towards cutting-edge technologies like IoT and virtualized systems

### Network Alignment Researcher (UCI Independent Research on Graph Algorithms) March 2020 – June 2020

Undergraduate Researcher

- Compiled a database of Orthologs (Related Genes/Nodes between two graphs, found through biological research) of over 200 GB from over 25 separate data sources
- Discovered over 40 competing alignment algorithms and compiled and parsed over 10 those algorithms to compare performance against created Local Network Alignment algorithm
- Mentored a fellow undergraduate researcher and integrated a newcomer with established systems

## Independent Projects

### Raspi-Interface

July 2020 - Present

Lead Developer of a Team of 3

- Created a Raspberry Pi System Control Web-Interface via Client-Server model, Typescript and React for the Front-End, Python and Flask for an API Backend, and GitHub Actions to Integrate CI/CD principles
- Implemented customized build scripts for testing and building, automating hours of testing
- Continuous daily stand-up meetings with project specifications refinement, DevOps/Agile development process and progress reports

### Electro-Git

June 2020 - Present

Lead Developer of a Team of 4

- Implementing a version control GUI interface with Electron, ReactJS, interfacing with a git API
- Refactored and improved the performance of the application over several iterations, improving build and startup performance by over 40%
- Weekly stand-up meetings, establishing specifications and showcasing prototypes

## Hackathon Projects

### SDHacks

October 2019

- Led a team of three in developing a web application, designing tasks and subdividing workload
- Leveraged Computer Vision to turn photos into usable data for future analysis
- Developed back-end server with flask and deployed with Cloud Computing Technologies (AWS)