

# LILY (JIAYU) LI

lily.jiayu@gmail.com | (408)757-0633 | 6465 Crown Blvd. San Jose, CA 95120  
LinkedIn: jiayu-lily-li | GitHub: lilyli333 | Website: lilyli333.github.io

## EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

**COMPUTER SCIENCE (BS)** MINOR IN BUSINESS

Expected Graduation: May 2022

Overall GPA: 3.81

James Scholar

## EXPERIENCE

### LinkedIn Corporation

SOFTWARE ENGINEERING INTERN

May 2021 – Aug 2021

- + Worked on LinkedIn's flagship Android application in the Search & Discovery's UX – Blended Search Team

### Brunswick Corporation

SOFTWARE ENGINEERING INTERN

Feb 2020 – May 2021

- + **Web App (PHP, Laravel, SQL)**: created an internal website to automate job changes within Brunswick manufacturing plants. Allows workers to bid for new jobs/shifts within the corporation and automatically generate bid winners using an algorithm that gives preferences to certain workers with given conditions set by HR
- + **Web App (HTML5/CSS, JavaScript, Three.js, WebGL)**: renders 3D boat models for Brunswick's subsidiaries, allowing users to interact with the model: see 360° view of different boats, try different add-on options, and experience the boat from different points of view
- + **Full-Stack (MERN Stack: MongoDB, Express, ReactJS, Node.js; RESTful APIs)**: created "build-your-boat" **iframe** for SeaRay's boat release to increase customer engagement
- + **Front-End**: created outward-facing website for i-Jet Lab using **ReactJS** to engage viewers
- + **iOS (Swift)**: created a client-side application for Whale's pioneer Livewell system with user-friendly & intuitive UI/UX for remote control of **IoT** devices via **BLE**; facilitated project communications between teams
- + **Android (Java)**: created **Google Glass** application for Boston Whale's manufacturing plants; allows workers to view real-time performance data and remotely access main server via **BLE**; aims to increase workflow efficiency and productivity; currently in use by several manufacturers in Florida; acted as **project manager**
- + **Robotics (ROS/OpenCV)**: created pipelines for panoramic **image stitching**, joystick control of robot via **CAN messaging protocol** and **Bluetooth**

## RESEARCH

### Machine Learning to Detect Fertilizer Adulteration

UNDERGRADUATE RESEARCH ASSISTANT

Sep 2019 – December 2020

- + Conducted research with Professor Hope Michelson on the applications of machine learning
- + Problem statement: detect images of adulterated fertilizer to aid farmers in Sub-Saharan Africa
- + Created image recognition machine learning model (**CNN**), achieving ~90% prediction accuracy
- + Designed UI/UX of mobile application, constructed database (**Firebase**) architecture
- + Led group of students in developing **Android** application; embedded ML model (**Tensorflow Lite**) into mobile app; currently being tested by Tanzanian farmers and government regulators

## SKILLS

### PROGRAMMING LANGUAGES

C/C++, HTML/CSS, Java, JavaScript, PHP, Python, R, Swift, Verilog

### TECHNOLOGIES/APIs/Frameworks

Arduino, Bash, Git, Google Firebase, Google Glass, Laravel, Machine Learning (TensorFlow, Keras, MobileNet), Microsoft Azure, MongoDB, NodeJS, NVIDIA Xavier, Raspberry Pi, ReactJS, SQL, Three.js, WebGL

### SOFT SKILLS

Agile (Scrum), DevOps, Project Management, UI/UX Design, User-Centered Design Thinking

### LANGUAGES

English (native), Mandarin Chinese (fluent)