# JIAYU (LILY) LI

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### **EDUCATION**

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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

Expected Graduation: May 2023 Technical/Major GPA: 3.86

Overall GPA: 3.74

### **EXPERIENCE**

### **Brunswick Corporation**

### **SOFTWARE DEVELOPMENT INTERN**

Feb 2020 - Present

- + **Website** development using **MERN Stack** (MongoDB, Express, ReactJS, Node.js) and **RESTful API**: creating an iframe for SeaRay's newest boat release to increase customer engagement; will be included as the landing page on the launch website (projected completion date: late 2020)
- + **Website** development: created new website for i-Jet Lab using **ReactJS** to engage potential hires and increase visibility amongst students
- + **iOS** development using **Swift**: created application for Whale's pioneer Livewell system with user-friendly & intuitive design that allows for remote control of hardware components via BLE; application will be available to customers once project reaches production phase
- + **Android** development using **JAVA**: created **Google Glass** application for Boston Whale's manufacturing plants, allows workers to select tasks and view data via **BLE** connection to server; aims to ease workflow and increase productivity
- + Robotics (**ROS/OpenCV**): accomplished camera streaming; panoramic **image stitching**; joystick control of robot using joystick via **CAN messaging** using **Bluetooth**

### **RESEARCH**

## **University of Illinois Urbana-Champaign, College of ACES**

### MACHINE LEARNING TO DETECT FERTILIZER ADULTERATION

Sep 2019 - Present

The research is led by Professor Hope Michelson in the Department of Agricultural and Consumer Economics (ACE) at UIUC. Current use of fertilizer in Tanzania has decreased, leading to lower agricultural productivity. The innovation aims to assist farmers in developing countries by detecting adulterated fertilizers using machine learning image classifier algorithms embedded in mobile solutions. We are working in collaboration with local farmers and government regulatory agencies, directly impacting them through novel technologies.

- + Created image recognition machine learning model, achieving ~80% prediction accuracy
- + Spearheaded development of Android application; embeds model in simple UI/UX; currently being tested by Tanzanian farmers and government regulators

### **SKILLS**

### **TECHNICAL**

Android, C/C++, HTML/CSS, JAVA, JavaScript, Machine Learning (TensorFlow, Keras, MobileNet), NodeJS, python, React, Swift

### **TECHNOLOGIES**

Agile, Arduino, DevOps, Git, Google Glass, Linux, Microsoft Azure, NVIDIA Xavier, Raspberry Pi

### **LANGUAGES**

English, Mandarin Chinese