# **Bradley Hsu**

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#### **Education**

#### **Washington University in St. Louis**

St Louis, MO

B.S. IN COMPUTER SCIENCE AND MATH (PROJECTED)

- GPA: 3.92; Dean's List
- Relevant Coursework: Data Structures and Algorithms, Data Science, Intro to Al, Management, Linear Algebra, Vector Calculus, Systems Software, Human-in-the-loop Computation, Visual Screen Design

Saratoga High School - National Merit Finalist; Very High Honors

## Work Experience

Bonauria August 2021 - Current

SOFTWARE DEVELOPER St. Louis, MO

- · Working on machine learning based telehealth system used to diagnose hearing loss in South Africa
- Building front-end in HTML/CSS/JavaScript; Debugging back-end machine learning models in Matlab, Python and C#

#### **Washington University in St. Louis**

August 2021 - Current

TEACHING ASSISTANT FOR CSE 217 St. Louis, MO

- Teaching Assistant under Professor Marion Neumann for Intro to Data Science class
- Leading 10 person lab groups through Python-based Data Science labs, hosting office hours and assisting with grading

#### Juba Lab - Washington University in St. Louis

August 2021 - Current

RESEARCH ASSISTANT

St. Louis, MO

- Conducting research with PhD candidate under Professor in Natural Language Processing
- · Working on semantic role labeling, making algorithms that understand how words in sentences relate to each other

### **Projects**

#### Eco2Go Tracker - Winner at Hacktech 2021

REACT, JAVASCRIPT, GOOGLE CLOUD PRODUCTS

- · Selected as winning hack at Caltech's Hacktech 2021; Implemented tracker for university Eco2Go recycling program
- · Built facial recognition component with React, tensorflow.js wrapper, and Firebase Cloud Storage integration
- · Built dynamically updating React web app with Google Cloud Firestore integration

#### **WashU Course Chat Linker**

REACT, NODE.JS, AMAZON WEB SERVICES, EXPRESS.JS, MONGODB, DOCKER

- Co-built website for students to find and upload links to class groupchats. Used by 300+ people/more than 1/5th of my WashU class
- · Deployed app on AWS with Docker; built Node.js backend for MongoDB database; built Express.js endpoints; designed React frontend

#### **Domain General Attention Classifier**

PYTHON, NUMPY, PANDAS, KERAS/TENSORFLOW

- · As Software Lead for WashU Neurotech, built detector for human attention based on EEG brainwave data
- · Wrote signal processing and data pipeline scripts in Python, NumPy, and Pandas; Implemented various ML algorithms in Keras/Tensorflow

#### **BlockIt APK**

KOTLIN, MOZILLA-MOBILE/FENIX

• Forked Mozilla's fenix Android browser to generate APK hardcoded to block user specified websites to improve personal productivity

## Activities/Leadership \_\_\_\_\_

WashU Neurotech August 2020 – Current

CO-PRESIDENT; SOFTWARE LEAD

• Responsible for meeting organization and planning out development timelines; Led development of machine learning models

#### Saratoga High School Science Olympiad

2016-2020

FOUNDER, PRESIDENT

• Led team of 30 people; coordinated and led members in 23 different events; founded educational summer camp to raise \$5000 budget

Skills\_

**Languages** Java, Python, HTML/CSS, JavaScript, TypeScript, C++, C#, Matlab, Kotlin

Libraries/Frameworks NumPy, Pandas, Sklearn, Keras/Tensorflow, Pytorch, React, Node.js, Express.js

**Tools** MongoDB, Google Cloud Platform, AWS, Docker