JASON YANG

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EDUCATION

University of California, Berkeley **Expected May 2022**

- Bachelor of Arts in Computer Science, GPA: 3.5
- Relevant Coursework: Efficient Algorithms and Intractable Problems, Data Structures, Introduction to Database Systems, Great Ideas in Computer Architecture, Introduction to Artificial Intelligence, Structure and Interpretation of Computer Programs, Discrete Math and Probability Theory

SKILLS

Languages: Python, Java, C, C++, HTML, CSS, JavaScript, SQL, RISC-V Assembly

Tools: Git, MySQL, PostgreSQL, SQLite, Flask, OpenMP, Intel SSE, OpenCV

EXPERIENCE

Research Assistant **Feb 2020 - Present**
Roland Henry Laboratory at the University of California, San Francisco *San Francisco, CA*

- Developed and deployed Arches, a Flask REST API with OAuth2 authentication to facilitate Multiple Sclerosis patient data analysis at the Roland Henry Laboratory
- Designed and implemented a SQLite3 database storing patient information to drive Arches
- Built a Python application to insert patients' real-time Fitbit biometric data directly into the database

Software Engineering Intern **June 2019 - August 2019**
Tala Security *Fremont, CA*

- Categorized and created security profiles of Chrome Web Store extensions to analyze Content Security Policy reports
- Designed and implemented a PostgreSQL database to store each extension's URLs accessed and triggered
- Analyzed domain frequency and URL frequency to drastically reduce false positives from Content Security Policy violations by over 60%

Software Engineering Intern **June 2018 - August 2018**
Tala Security *Fremont, CA*

- Invented metabase, a metadata database that captures the security profile of third-party web objects by analyzing the US Government's National Vulnerability Database and every object's source code
- Utilized metabase to generate a security score for each client's website
- Visualized analysis using Plotly to display interactive graphs and tables
- Published novel metabase invention in US Patent 20200137126A1

PROJECTS

vARsity **August 2019 - December 2019**
Created a mobile application that makes on-field soccer decisions as a virtual referee almost instantaneously from the use of a mobile phone's camera through computer vision. Python, OpenCV

Space Invaders **June 2019 - August 2019**
Recreated and extended the classic game Space Invaders with both co-op and head-to-head multiplayer. Java

LEADERSHIP AND EXTRA-CURRICULAR ACTIVITIES

UAVs at Berkeley **August 2019 - Present**
Member of the Object Detection, Location, and Classification team competing in the AUVSI-SUAS competition. Identified spontaneously placed objects from the UAV's camera using OpenCV, Scikit-Learn and TensorFlow.

Friends of Children with Special Needs **August 2014 - Present**
Founder and President of the Computer Division of FCSN. Coached and led club members to teach Scratch, Java, HTML, CSS, and JavaScript classes to special needs students.