

ROBERT SMITH

✉ rsmith614@gmail.com |  [rsmith614](https://www.linkedin.com/in/rsmith614) |  [rsmith614](https://github.com/rsmith614) |  [Portfolio](#) | ☎ (209) 614-6990

Education

University of California, Merced

Computer Science and Engineering | GPA, 3.93

Merced, CA

Aug 2019 – May 2023

Relevant Coursework

Software Engineering, Human-Computer Interaction, Distributed Software Systems, Database Implementation, Database Systems, Digital Image Processing, Object Oriented Programming, Algorithm Design and Analysis

Skills

Languages | C++, Python, Java, Kotlin, SQL, JavaScript

Libraries, Other | Pandas/Numpy, Git, LaTeX, Flask, Tensorflow, Hadoop, Spark, RPC (gRPC), Qt, OpenGL

Projects

Cilantro Yield Estimation | Python, Dart

May 2023

<https://github.com/rsmith614/CSE319-SupHerb>

- Designed, implemented, and tested a system that allows herb production supervisors to estimate the yield of cilantro plants using computer vision.
- Researched and developed a regression-based convolutional neural network using Tensorflow and Keras that would estimate the yield of individual plants, then trained it on over 6,000 images, resulting in less than 25% relative error on test data.
- Built a web app using Flask for the backend and Flutter for the frontend in order to track harvest events and serve yield inferences.

Dialogues | Kotlin

May 2023

<https://github.com/rsmith614/Dialogues>

- Developed a virtual translator mobile app which allows users to take a picture of text, have the text translated to the language of their choice, then have the text read back to them.
- Utilizes Google MLKit for optical character recognition (OCR) and translation, developed for mobile using Android Studio.
- Maintained heavy focus on user-centered design, ensuring quality user experience through the consideration of things like color, font, button size and placement, and customization options that provide the user with the best experience possible without compromising functionality.

Work Experience

Student Technology Consultant | Classroom Support

Merced, CA

UC Merced Office of Information Technology

Aug 2022 – May 2023

- Assisted professors, TAs, and students in the use of classroom A/V technology with rapid troubleshooting in order to get classroom instruction, meetings, etc. on track.
- Maintained communication with members of staff and other IT sub-departments in order to escalate, schedule, and delegate work and tasks in order to keep the campus running with optimized efficiency and effectiveness.

Subject Tutor | K-12

Merced, CA

Bali Learning Center

Mar 2021 – Aug 2022

- Conducted several tutoring sessions weekly, taught and fortified important skills through a combination of helping students with assigned homework and crafting practice routines based on students' skill, comfort, and academic needs.
- Tutored over 50 different students in several disciplines of math leading up to and including college-level calculus, improving some students' grades by more than 10%.