# **COLE SCHROEDER**

COMPUTER ENGINEER

## **EDUCATION**

#### University of Southern California Viterbi School of Engineering Jan 2021-May 2022 Master of Science in Computer Science; GPA 4.0 University of Southern California Viterbi School of Engineering Aug 2018-May 2022 Bachelor of Science in Computer Science; Directors Scholarship; GPA 4.0 South Pasadena High School Aug 2014-Jun 2018 Valedictorian; California Scholarship Federation Life Membership; Mathematics Achievement Award; Kathryn

**EXPERIENCE** 

### **Application Developer**

#### Rain Rain Sleep Sounds

- Developed and tested iOS and Android app code, branding materials, visuals, subscriptions, and advertisements individually and as a mentor in a team of 4
- Integrated and tested machine learning models for live object detection
- Published bug fixes, updated versions, and new features on apps with thousands of users

#### **Undergraduate Researcher**

#### Interactive and Collaborative Autonomous Robotics Lab

Larkin Crary Memorial Sportsmanship Award; GPA 4.0

- Created a tool for generating random object distributions and measuring spread
- Evaluated 3 spread measures with a PhD student for robot reinforcement learning
- Presented poster at research symposium open to hundreds of students and faculty

#### **Undergraduate Teaching Assistant**

Data Structures and Operating Systems Courses at USC

- Facilitated weekly laboratory section of 30 to 40 students
- Explained concepts, problem solved bugs, and filled in student understanding during weekly office hours

## PROJECTS

#### Starblast (iOS Application)

App Development Internship

- Implemented and troubleshot game logic, animations, notifications, and sound design
- Analyzed player data to tune user experience in level progression and interface

#### **Open Home (Privacy First Smart Speaker)**

Capstone Computer Science Course in Collaboration with Identity Review

- Developed an extensible, voice responsive virtual assistant MVP on Raspberry Pi
- Led the API integration on a team of 6 to implement music, lights, and alarms

## **TECHNICAL SKILLS**

Java, C, C++, Python, Swift, HTML, CSS, JavaScript, GitHub, JUnit, Photoshop, Illustrator

## ACTIVITIES

Art & Engineering Club Vice-President, Volleyball, Spikeball, Hiking, Board Games

Jul 2020-Aug 2021

Jan 2021-May 2021

May 2020-Aug 2021

Jan 2021-May 2021

Jan 2020-May 2021