

# COLE SCHROEDER

**SOFTWARE ENGINEER** 



# TECHNICAL SKILLS

Java, C, C++, Python, Swift HTML, CSS, JavaScript Photoshop, Illustrator, LaTeX



# RELEVANT COURSEWORK

### **COMPUTER SCIENCE**

Software Engineering Artificial Intelligence **Computer Graphics Operating Systems** Algorithms & Computing Theory **Data Structures Penetration Testing** 

## **MATHEMATICS**

Multivariable Calculus Linear Algebra **Probability Theory** 



## INTERESTS

Volleyball Snowboarding Painting, Drawing, Digital Art

## **EDUCATION**

## 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 Larkin Crary Memorial Sportsmanship Award; **GPA 4.0** 

## **EXPERIENCE**

#### JUNIOR APP MANAGER

May 2020-Aug 2020

#### Rain Rain Sleep Sounds

- ► Managed project structure, organized tasks, and projected task timelines
- ► Worked independently full-time with weekly check in meetings
- ► Published 2 apps to the iOS app store

#### APP DEVELOPER

May 2019-Aug 2019

## Rain Rain Sleep Sounds

- ► Completed code and marketing tasks during 40 hour work weeks
- ► Implemented functionality and branding materials for iOS and Android apps

## INVOLVEMENT

#### UNDERGRADUATE TEACHING ASSISTANT

Jan 2020-Present

## **USC Data Structures Class (Spring) and Operating Systems Class (Fall)**

- ► Facilitated weekly laboratory section for data structures course
- ► Explain concepts and tutored students during weekly office hours

## ACADEMIC CLUB VICE-PRESIDENT

Jan 2020-Present

#### Corpus Callosum at University of Southern California

- Coordinate with other clubs and lead project team formation
- ► Plan leadership meetings and introduced efficient policy changes

#### POLYMATHIC FELLOW

Oct 2018-May 2019

## University of Southern California Sidney Harman Academy for **Polymathic Study**

- Collaborated with a team of 3 to research Martian colonization and habitability
- ► Drafted a research paper analyzing a 3-month plant growth experiment

## PROJECTS

#### STAR BLAST (IOS APP)

Jul 2020

### **App Development Internship**

- ► Integrated artwork for sprites and added animations and particle effects
- ► Setup notifications, analytics, game logic, and user interface
- ► Tuned animations to reach 60 frames per second performance

## **BELLVISION FOR ANIMAL CROSSING (IOS APP)**

May 2020

## App Development Internship

- ► Trained machine learning models to identify 441 animal crossing items
- ► Created an easy-to-use interface for real time object detection using camera

### RAIN RAIN SLEEP SOUNDS (ANDROID APP)

Jul 2019

## **App Development Internship**

- ► Debugged and refactored code to reduce app crashes to under 1%
- Released features to thousands of users
- ► Reworked user interface for a more seamless user experience

cole-schroeder.com







