

# **COLE SCHROEDER**

SOFTWARE ENGINEER



# SKILLS

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



# **COURSEWORK**

**Computer Science** 

Computer Systems
Algorithms & Computing Theory
Principles of Software Dev.
Data Structures
Embedded Systems
Penetration Testing

# **Physics**

Mechanics & Thermodynamics Electricity & Magnetism

## **Mathematics**

Multivariable Calculus Linear Algebra Probability Theory



# INTERESTS

Volleyball
Tutoring
Snowboarding
Painting and Drawing
Graphic Design

## **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**

#### **APP DEVELOPMENT INTERN**

MAY 2019 - AUG 2019

#### Rain Rain Sleep Sounds

- Developed and tested IOS and Android mobile applications using Swift, Objective-C, Java, and Kotlin
- ► Created and analyzed ad campaigns and other branding materials
- ▶ Implemented photo editing, media playback, subscriptions, and ads

#### **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 using interdisciplinary experiments and resources
- ► Contributed to a research paper analyzing a 3-month plant growth experiment
- ► Constructed an interactive educational virtual reality environment

#### RESEARCH INTERN

MAY 2016 - FEB 2018

# **University of Southern California Locomotor Control Lab**

- ► Developed 8 virtual environments in Google Sketchup in order to study walking patterns of patients with Parkinson's disease
- ► Self-taught Python programming language by exploring documentation
- ► Participated in developing an interactive walking simulation with audio and visual feedback for step height over obstacles

# PROJECTS -

### **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

#### **IMPRINT - TEXT ON PHOTOS (IOS APP)**

JUN 2019

#### **App Development Internship**

- ► Coded a fully-functioning, easy-to-use app for putting text on photos
- ► Followed design process from initial concept to app store publishing
- ► Integrated and extended external APIs for a color and photo pickers

#### **SOUNDWAVE (WEBSITE)**

MAY 2019

#### Corpus Callosum: USC Art and Engineering Club

- ► Managed a team of 5 in creating a music responsive 3D animated landscape
- ▶ Utilized the p5.is JavaScript library for graphics along with HTML and CSS
- ► Presented at a public showcase to faculty, staff, and students

cole-schroeder.com







