

Stephen Jayakar

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EDUCATION

UC BERKELEY

BS IN EECS

ELECTRICAL ENGINEERING &
COMPUTER SCIENCE

May 2019 | Berkeley, CA

College of Engineering

LONGVIEW HIGH SCHOOL

May 2016 | Longview, TX

Valedictorian in I.B. Programme

LINKS

LinkedIn:// [stephenjayakar](#)

GitHub:// [stephenjayakar](#)

Facebook:// [stephenjayakar](#)

COURSEWORK

** indicates in progress*

SICP

Data Structures

Computer Architecture

Discrete Mathematics

Probability Theory

Algorithms

Computer Graphics and Imaging*

Intro to Database Systems*

Operating Systems*

SKILLS

PROGRAMMING

Experienced:

Python • Swift • \LaTeX • Java

Familiar:

C • C++ • RISC-V ASM • Rust •

UnityScript • JavaScript

ENVIRONMENTS

Xcode • iOS • Firebase • Figma •

Spotify-API • Bash • Windows • OSX •

Unity3D • React

INTERESTS

MUSIC

Violin • EDM • Guitar • Singing

VIDEO GAMES

League of Legends

Super Smash Bros. Melee

osu!

EXPERIENCE

MOBILE DEVELOPERS OF BERKELEY | IOS ENGINEER

Sept 2017 - Present | Berkeley, CA

- Completed a series of mini-projects to demonstrate Swift proficiency which utilized techniques such as asynchronous database calls and live location monitoring.
- Designed wireframes and mockups for the application our team is developing using material design principles.

OFFICE OF NAVAL RESEARCH | SOFTWARE ENGINEERING APPRENTICE

May 2015 - July 2015 | Monterey, CA

- Created four highly-specialized data visualization structures using D3.js.
- Collaborated with my team member and professor to generate interactive graphs of her research data on Lexical Link Analysis.

PROJECTS

STREAMLINE | SOCIAL MUSIC PLATFORM

Oct 2017 - Dec 2017

- Constructed from the ground-up a cross-platform mobile social music experience where users post "stories" of songs to their friends daily.
- Used Agile workflow to manage our team of 7 iOS and Android engineers.
- Utilized Firebase as well as Spotify API extensively to implement our feature set
- Published the app both to Google Play Store as well as Apple's App Store

ARYA | MELEE RESEARCH FRAMEWORK

Mar 2017 - Present

- Solving micro-situations in Super Smash Bros. Melee using search algorithms and libmelee API.

CAL-NES | NINTENDO ENTERTAINMENT SYSTEM EMULATOR

Oct 2017 - Present

- Hacked together with a team of four a 6502 CPU with full support
- Debugged tricky Picture Processing Unit (PPU) edgecases, and working on full Zelda run-through.

3DENGINE | SOFTWARE RAYTRACER AND RASTERIZER

Apr 2017 - Present

- Built a live 3D raytracer to further my understanding of OOP and Linear Algebra, as well as the OBJ file format.
- Also constructed a software rasterizer to delve into the basis of modern 3D rendering as well as techniques such as Z-Buffering and perspective transforms.

AWARDS

2016	Regional	KETK Student of the Year for Northeast Texas
2015	National	Science and Engineering Apprenticeship (SEAP) Award
2015	Level 1	UIL State Violinist
2014	Level 1	UIL State Violinist
2013	Nationals 1 st	Technology Student Association OSSD