Stephen Jayakar

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EDUCATION

UC BERKELEY
BS IN EECS
May 2020 | 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)*
CS61A: SICP
CS61B: Data Structures
CS61C: Computer Architecture
CS70: Discrete Math & Prob. Theory
CS161: Computer Security
CS162: Operating Systems
CS164: Languages and Compilers
CS168: Internet Architecture
CS170: Algorithms
CS184: Computer Graphics & Imaging
CS186: Database Systems
CS194-34: Cryptography*
CS262A: Advanced Computer Systems*

SKILLS

PROGRAMMING
Experienced:
Python3 • JavaScript (ES6) • Java
Familiar:
PostgreSQL • Objective-C • C • C++ • GLSL

FRAMEWORKS AND ENVIRONMENTS
React • Graphene + GraphQL • Flask • SQLAlchemy • Xcode • React Native • iOS • Firebase • OpenGL • Figma • LaTeX • Bash • Windows • OS X

DESIGN PRINCIPLES
MVC • MVVM • Container-Component • Ant Design • React Bootstrap • Material Design •

EXPERIENCE

AIRBNB | Full Stack Engineering Intern
May 2019 - August 2019 | San Francisco, CA

- Scheduled a daily data analytics Apache Airflow job using Pyspark to calculate the Wilson Score on Plus's upleveling data.
- Architected an end-to-end user feedback form on Plus's main host-facing page, after coordinating amongst other engineers, a designer, and an experience researcher.
- Used React + Apollo for building the frontend with components within Airbnb's "Design Language System", accounting for cross-site styling and accessibility.
- Utilized Airbnb's Powergrid library to add modifications to Plus's Thrift IDL services, coordinating the mapping of new GraphQL endpoints with business logic to in-house database calls across services.

GEM | Full Stack Engineering Contractor
August 2018 | San Francisco, CA

- Rolled out new customer-facing features in the frontend using ES6 and ReactJS, with some supplemental libraries such as Apollo and React Bootstrap.
- Designed GraphQL endpoints using Graphene + Flask after implementing a new database model using PostgreSQL and SQLAlchemy.
- Made some minor modifications to the NodeJS server to update some of the product's Server Side Rendered (SSR) pages.
- Replicated some functionality into the company's Chrome extension which automates loading in possible candidates from LinkedIn.

DOCUSIGN | iOS Software Engineering Intern
May 2018 - July 2018 | San Francisco, CA

- Updated the Objective-C codebase to support iOS 11 features like FaceID.
- Rolled out some specific UI and animation rewrites for iPhone X support.
- Utilized JIRA and Confluence during the Agile development process on the mobile team.
- Coordinated with the API team as well as Product to begin getting the app to conform with Apple Push Notification Service and show app notifications.

PROJECTS

CALNES | Python3 NES Emulator
Oct 2017 - Present

- Architected an open-source implementation of the original Nintendo Entertainment System.
- Created a working 6502 CPU that passes most test suites.

THREE-PARTICLES | 2D Particle Simulation
Feb 2019 - Present

- Created a 2D fluids simulation in C++ and OpenGL with my team for a CS184 final project, with OpenCV as well as mouse interaction; recreated in three.js.

LOL-TENSORFLOW | Game Prediction Model
Mar 2018 - Present

- Designed and implemented a deep neural network using TensorFlow and data from the League of Legends RESTful API.
- Trained on team compositional data on past matches to determine which team would win with approximately 88% certainty.