

# Avinash Rao

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## EDUCATION

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### University of California, Berkeley *(Expected Graduation: Spring 2023)*

B.S: Electrical Engineering & Computer Sciences; GPA: 4.0; Junior Standing

- **Relevant Coursework:** Data Structures and Algorithms, Structure and Interpretation of Computer Programs, Designing Information Devices and Systems (I & II), Multivariable Calculus
- **Distinguishments:** Regents and Chancellor's Scholar (top < 1% of students), The Leadership Award & Scholarship Recipient, National Merit Finalist & Scholarship Recipient (top 5% of students nationally)

## SKILLS

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**Languages and Frameworks:** Proficient in Python (Including Pandas, NumPy, & Django), Javascript (Including Node, React, Next JS, & Angular), Typescript, Java, HTML, CSS, SQL, & GraphQL. Familiar with C, Swift.

**APIs & Tools:** AWS, Vercel, Git, MongoDB, Netlify, Electron, JUnit, Jest, Firebase, Algolia, Bootstrap, MaterialUI

## EXPERIENCE

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### Software Engineering Intern | June 2021 - Present

OKC Thunder Data Solutions

- Designed and implemented multiple frontend components with Angular, Django, and PostgreSQL for users to view and sort team development metrics by priority and recency
- Optimized Django queries with Redis caching, improving performance by 70% on several filters
- Integrated Amazon S3 as a datastore for adding and updating user media

### Software Engineer | August 2020 - May 2021

Dormtalk - Berkeley SkyDeck

- Developed and scaled a social networking application for U.C. Berkeley students with React JS, Bootstrap, and Firebase in an Agile environment
- Wrote 40+ unit and integration tests with Jest for an iterative code review process
- Selected to the prestigious Berkeley SkyDeck Hotdesk program (top 5% of startups)

### Research Intern | June 2019 - May 2019

Stony Brook University

- Analyzed circuit performance through Python and used regression/interpolation to make accurate predictions on efficiency and power.
- Invited to and published research in the ACS National Convention and APS National Meeting

### Software Development Intern | August 2018 - June 2019

DVHS Career Center

- Built interactive web platforms with Vue JS for my high school's counseling department
- Led a team of developers in implementing a Python web-scraping algorithm for admissions quotas

## TECHNICAL PROJECTS

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### GraphQL Restaurants API | December 2020 - January 2021

- Created a Node JS restaurant sorting API with Express, GraphQL, and ApolloServer
- Integrated Mongoose and performed real-time queries/mutations with React JS and ApolloClient

### TaskMe | September 2020 - October 2020

- Built a task management desktop application with React JS and Electron
- Utilized Firebase to store tasks and wrote cloud functions that automated CRUD operations

### Apptivism | June 2020 - August 2020

- Developed and deployed a JS web app and Swift IOS app for organizing protests and activist networking
- Integrated the Mapbox API to facilitate event planning and Algolia API to perform real-time queries