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# Sahana Rangarajan

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## **Objective**

To attend a graduate program focused upon systems (especially the protocol and design of network systems) and gain further experience with architecting unique solutions around these systems.

#### **Education**

Undergraduate: University of California, Berkeley

B.S. in Electrical Engineering and Computer Science (Fall 2015 - Fall 2018)

Minor: English

### **Skills**

• Fluent in: Python, Java, Groovy, PHP, Swift, Matlab, C/C++, SQL, HTML, CSS, JavaScript, NodeJS, Jest, TypeScript, and Objective-C

 Have worked with: Jenkins, AWS, Earl Grey and Jest frameworks, Akamai, Tableau, Snowflake, PostgreSQL, Artifactory, TensorFlow, PagerDuty, DataDog

• Experienced in working at an infrastructural level with DBMS and network architecture, as well as in designing solutions to problems that arise in design at this level

• A clear and communicative writer both in technical (research papers, technical documentation, rigorous test plans) and non-technical (fiction, art critique) realms

#### **Industry Experience**

- Software Development Engineer in Test at Sonos, Inc. (2019-present):
  - App Automation:
    - Joined pioneering effort in app automation as an intern, continued full time
    - Developed code to support new automation framework in order to facilitate future test environment setup
    - Devised automated nightly feature-based tests to run on CI/CD and catch bugs programmatically
  - Cloud Services:
    - Involved in writing code to develop and maintain cloud services
    - Automating testing of cloud services in CI/CD pipeline
- Software Development for EmpowOR project at UCSF Benioff Children's Hospital (2019):
  - o Created web server on Raspberry Pi and built a database for patient information
  - Wrote code for secure, stable communication of confidential data between server and iOS app
- Full Stack Engineering Intern at GoFind.AI (2017):
  - o Instrumented frontend and backend communication in Android app using Angular.js
  - Used TensorFlow computer detection and neural net frameworks to fine-tune visual search engine

#### **Research Experience**

- Hybrid Systems Laboratory (2018-2019):
  - o Investigated low rotational inertia in hybrid energy systems and battery energy storage systems for synthetic inertia using MatLab neural nets to simulate energy systems
- RISELab (2018-2019):
  - Used React to account for user interactions with streaming data on realtime interactive SQL database display tool
- AutoLab (2017-18):
  - Built pipeline to create structured databases from unstructured data sources using TensorFlow object detection API; and authored whitepaper on system
- Renewable & Appropriate Energy Lab (2017-18):

- Assisted in creation of a long-term energy capacity modeling tool (PROGRESS) and subsequent migration to Python
- Coauthored IEEE-published academic paper ("Generation expansion analysis in low data settings")

# **Independent Projects**

- Conceived and developed iOS whale-watching app using identification key logic to identify cetaceans based on visual user input
- Wrote a web app to automate taste profiles and personalized playlists for Spotify users using Spotify's open-source API

# **Other Positions Held**

- Electrical Engineering Course Mentor/Tutor
- Member of Society of Women Engineers Outreach Committee
- Television Beat/Reporter for *Daily Californian*
- Violin tutor for Berkeley Unified School District students through The Music Connection