## Ashwin Ramaswami

I have 5+ years of experience architecting and implementing distributed web applications in the cloud, including AWS, Azure, and GCP. I have implemented DevOps CI / CD workflows and have deep familiarity with open source infrastructure and tooling, such as Terraform. I am also an experienced full-stack engineer; I have worked with projects involving Python, Node.js, and React, with databases including SQL, MongoDB, and Cassandra, with the entire development cycle up to productionization. I am looking for an architect role on a challenging problem. For consulting work, please see <a href="https://ashwin.run/">https://ashwin.run/</a>.

## Current work

# Technical leadership

# Cybersecurity and Infrastructure Security Agency (CISA)

Election Security Initiative (June 2020 – Present)
Architected and implemented <u>Crossfeed</u>, a system for running scans to detect vulnerabilities in systems, using a distributed architecture with AWS Fargate, AWS Lambda, Elasticsearch, and React.

## **Stanford Internet Observatory**

Research Assistant (April 2020 – Present)

Architected and implemented web scraping technologies and infrastructure to support disinformation research at the <u>Observatory</u>. Built pipelines using Apache Beam, GCP BigQuery, and Twitter PowerTrack.

#### CodaLab

Research Assistant (June 2019 – Present)
Architected and implemented infrastructure improvements for the machine learning platform
CodaLab Worksheets, such as refactoring to use Azure Blob Storage and setting up CI / test infrastructure.

# **Technical consulting**

#### **Nooks**

Technical Consultant (September 2020 – Present) Worked to improve infrastructure and scalability for the video-calling platform Nooks. Set up a CI/CD pipeline and infrastructure with Google App Engine, Google Cloud Build, and Google Kubernetes Engine.

#### **Pulsar**

Technical Consultant (March 2020 - Present)

Architected and implemented a distributed system for gathering and aggregating real-time data from industrial machines for <u>Pulsar</u>, using AWS Lambda, React, and Cassandra on AWS. Led a team of developers for product development.

## **Eventive**

Technical Consultant (June 2019 - Present)

Architected and implemented a system for ingesting and serving both livestream and video content for <a href="Eventive Virtual Festival">Eventive Virtual Festival</a>, with DRM protection, using Azure Media Services.

## The Stanford Daily

Chief Technical Officer (June 2018 – June 2020)

As the first CTO of the Stanford Daily, I established a team to work on software engineering and set up training and development processes for the <a href="website">website</a> and mobile app, using WordPress, React, and React Native.

#### **TreeHacks**

Organizer (June 2018 – June 2020)

Led the tech team for hackathon technology, and built and open-sourced <u>Root</u>, an application portal and hackathon management system. Uses React, Express, and MongoDB.

#### **Anora**

Engineering Lead (Nov 2017 - June 2019)

Architected and developed a full-stack web application and data pipeline to retrieve FDA application data and display it in a search engine. Led a team of engineers to develop the product. Used AWS Lambda, AWS CloudSearch, React.

# **Education**

**Stanford University** 

B.S. Computer Science (2017 - 2021)

# **Previous work**

## Google

Software Engineering Intern (June 2019 – Sep 2019)
Worked with the Search UI Optimization team to
develop a system to detect regressions in latency
metrics on the Google search results page. Also
worked on interactive dashboards using Go.

## NCR Corporation

Software Engineering Intern (June – Aug 2018)

Built REST APIs for the NCR Platform and adapters between payment systems using Java and the Spring framework.

## **Nightwatch**

Technical Consultant (March 2020 – September 2020) Set up CI pipelines and developer infrastructure for the E2EE document collaboration platform <u>Nightwatch</u>. Uses React, Express.

## react-jsonschema-form

Maintainer (Jan 2019 - Present)

I maintain and release an open source React <u>library</u> for generating forms based on JSON Schema.

# **Contact**

Email: <a href="mailto:aramaswamis@gmail.com">aramaswamis@gmail.com</a>
Github: <a href="mailto:https://github.com/epicfaace">https://github.com/epicfaace</a>
LinkedIn: <a href="mailto:http://linkedin.com/in/ashwin-r">http://linkedin.com/in/ashwin-r</a>

# **Stanford Immigration and Policy Lab**

Research Assistant (Jan 2018 – September 2019) Implemented a web interface that uses machine learning to help Swiss and US agencies with refugee resettlement. Uses AWS EC2, Django, R.

# **Certifications**

AWS Certified Solutions Architect - Associate (2019) Microsoft Certified Professional (2018) Certified Scrum Master (2018)