

Anjan Ragh K S

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----- EDUCATION -----

New York University | New York, NY

Dec 2020

Master of Science in Computer Science | GPA: **4.0/4.0**

Related coursework: Large Scale Visual Analytics, Design and Analysis of Algorithms, Information Security and Privacy, Web Services, and Human Computer Interaction

National Institute of Technology, Surathkal | Karnataka, India

June 2017

Bachelor of Technology in Information Technology | GPA: 8.15 /10

----- PROFESSIONAL EXPERIENCE -----

Dept of Computer Science, NYU | New York, US

Jan 2020 – May 2020

Graduate Teaching Assistant - Programming Languages

- Assisting Professor Jeffery in the Programming Language course for developing assignments and syllabus structure for topics in **data structures and algorithms** in Haskell, Prolog, and SmallTalk.

Alive Engineering Platform | New York, US

May 2019 – September 2019

Machine Learning Research Intern

- Created, trained, and deployed a CNN model for analysing heart rate data from smart watch sensors to detect arrhythmia in firefighters. Achieved an accuracy of **98.12%**
- Deployed model on AWS EC2 with interfacing **GraphQL endpoints** developed on **NodeJS** with frontend in **ReactJS**. Push notifications for the users developed using the **Firebase Cloud Message Messaging**.
- Developed search interface for critical information searches with 6ms latency using **Elasticsearch**. Created a dashboard for analytics using **Kibana** by ingesting log data using **Logstash**.
- Developed **autocomplete** and improved search quality by implementing **recent and popular searches** with **MongoDB** querying along with caching in user session tokens.

Tesco HSC | Bengaluru, India

July 2017 – November 2018

Software Development Engineer

- Developed **REST APIs** to search through product information with custom mapping Elasticsearch on NodeJS. Provided search capabilities for multiple languages with **N-gram** mappings for agglutinative languages.
- Enhanced supplier **user experience** by providing **typeahead** for product categories using **Redis** cache for faster lookup.
- Created a numbering service for products worldwide previously built with SOAP based services by integrating them with cloud based APIs using **Sterling File Gateway** system.

----- PROJECTS -----

Object Recognition based photo search engine | [\[Link\]](#)

Spring 2020

- Designed and developed a web application for auto tagging images using **AWS Rekognition** for object label detection in images uploaded via the app. Images were stored in **S3** while tags were indexed into Elasticsearch for quick retrieval.
- Setup search using Elasticsearch where objects were indexed based on tags generated. Achieved a **latency of 10ms** for over 10000 images indexed.
- Application was developed completely serverless using **AWS Lambda** for coding backend functions in Python. Frontend for uploading and searching for images developed using **ReactJS** and deployed onto S3 bucket.

IMDb lookup | [\[Link\]](#)

Spring 2020

- Created a chrome extension that lets users lookup details of movies and tv shows directly from the tab they are currently on.
- Integrated ratings into netflix dashboard and added reviews from **Google News API** for the selected media.

Pet adoption in Seattle | [\[Link\]](#) [\[URL\]](#)

Spring 2020

- Designed and developed a website in **ReactJS** to display and provide adoption links for pets in the Seattle region of the US.
- Used **Reach Routers** to link between pages and **React Hooks** to maintain and store state between pages.
- Project build setup done with **Parcel** with **Babel** for transpiling code and standardization of code done using **eslint**. Deployed the code using **netlify**.

Restaurant Locator | [\[Link\]](#)

Fall 2019

- Developed a **serverless application** to notify users of restaurant details based on preferred location and cuisine.
- Application deployed using **AWS Lambda** for serverless backend, **Yelp API** to get restaurant data, **Elasticsearch** and **DynamoDb** for storage and faster retrieval of data and **AWS SNS** for notifying the users.

Intruder Detection using Cloudformation | [\[Link\]](#)

Fall 2019

- Created a **cloudformation** script that sets up **automatic intruder detection** through **AWS Kinesis Video Stream** into **AWS Rekognition** to find out if a person is known or not.

----- SKILLS -----

Programming: [Proficient]: Javascript, Python, C++, C, Unix, Git [Familiar]: HTML, CSS, Go, Typescript Haskell, Prolog, Julia, R, SQL

Libraries/Databases/Other: [proficient]: ReactJS, NodeJS, GraphQL, MongoDB, Elasticsearch, Kibana, Loopback, Express, Mocha, Chai, AWS [familiar]: Logstash, Firebase, Hadoop, PySpark, Docker, Kubernetes, Jira.