

Aravind Jyothi

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Education

- **Master of Science in Computer Science, University of Southern California (2020)**
 - *Notable Coursework:* Theoretical Machine Learning, Information Integration, Web Search Engines
- **Bachelor of Technology in Information Technology, Madras Institute of Technology (2018)**
 - *Notable Coursework:* Algorithms, Data Structures, Operating Systems, Databases, Digital Image Processing, Soft Computing and Computer Networks

Work Experience

- **Software Development Engineer - Amazon Web Services, Seattle WA (July 2020 – Present)**
 - Working with a fast-paced agile team for AWS IoT Greengrass which is an open-source edge runtime and cloud service that helps customers build, deploy and manage device software.
 - Experience building and operating a cloud service at scale deployed to multiple regions across the world: Contributed significantly to Greengrass V2 launch during reInvent 2020 – Designed and built multiple cloud REST APIs and cross-functional customer features which involved console and device teams.
 - Experience building software solutions with existing AWS services (S3, ECS, DynamoDB, Lambda, API Gateway, Kinesis, CloudWatch, CloudFormation etc.)
 - Experience with CI/CD deployments with extensive end to end testing such as User Acceptance and Integration Testing.
 - Providing excellent on-call support for the service. Designed and implemented the alarming infrastructure for high severity issues from the ground up.
- **Software Engineering Intern – Schlumberger, Houston TX (May 2019 – August 2019)**
 - Worked on a product which analyses and predicts profits, oil generation volume and cost using multiple input factors.
 - Implemented multidimensional sampling for sensitivity analysis with methods such as agglomerative and k-means clustering and a design of experiments approach using cartesian products.
 - Designed search space reduction approaches with a high reduction ratio and a nearest neighbor search for a particular data point using K dimensional trees.
 - Worked with complex parallel processing architecture (Rocket API, SLURM, GCP) to run multiple experiments.
- **Software Engineering Intern – Caratlane, Chennai (May 2017 – August 2017)**
 - Caratlane is a leading e-commerce website in the Indian market.
 - As part of the desktop team, designed and coded landing and subscription page for customers using HTML, CSS and JavaScript.
 - Wrote a REST API for retrieving customer data for an email subscription feature.
 - Helped migrate a significant portion of the codebase from Angular to React.

Skills

- **Programming Languages:** Python, Java
- **Databases:** PostgreSQL, DynamoDB, MySQL & MongoDB
- **Web Technology:** HTML, CSS, JavaScript – React, Angular, Node.js runtime, Flask, Django
- **Version Control, Orchestrators & Containers:** Git, Azure DevOps (VSTS), Docker, Kubernetes

Projects

- **News Search Engine** *Python, Flask, Jinja, JavaScript*
 - Built a web search engine which indexed hundreds of thousands of news articles from The Guardian using page rank algorithm and lucene (apache solr)
- **Corona Dash** *REST APIs, HTTP requests*
 - A flask application which tracks the COVID-19 pandemic cases in real time along with top headlines, API support & twitter streaming
- **Loki (Low Key)** - A package which provides IP, port pairs with random proxy rotation