Sai Duduru

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SUMMARY

I'm Sai Duduru, a Computer Science Engineering graduate from Virginia Tech with hands-on experience in cloud computing and software development. I am currently a Cloud Support Engineer at AWS, I specialize in deploying and managing cloud services, ensuring robust and secure environments. I am also interested in the world of Cyber Security, Data Engineering, Product Management and Software Development.

EDUCATION

Virginia Polytechnic Institute and State University (VT) **Blacksburg, VA**
Bachelor of Science in Computer Science: *Graduation May 2024*

RELEVANT SKILLS

Programming Languages/Technical skills: Java, C, Python, Swift, SQL, Linux, HTML, JavaScript, NodeJS, Docker, Kubernetes
Certification: AWS Data Engineering Associate, AWS Solutions Architect Associate, AWS Certified Cloud Practitioner
Tools/Libraries: Pandas, Scikit-Learn, Jupyter, Pytorch. Learning TensorFlow, SimSpaceWeaver in AWS, and Golf.

WORK EXPERIENCE

Amazon Web Services (AWS) **Herndon, VA**
Cloud Support Associate (DMI) *June 2024 – Present*

- Internationally collaborated effectively with the Developer, Messaging and IOT team specifically Mobile and Game Dev.
- Specializing in AWS services such as SQS, SNS, Connect, GameLift, Amplify, AppSync, GameSparks, SimSpaceWeaver
- Provided technical solutions to Enterprise, Business, and Govcloud customers, such as troubleshooting and creating Lambda functions, JSON Scripts, Service Flow Diagrams
- Debug and design Amplify code, step functions, HTML, JSON, GraphQL
- Provided custom solutions on how to configure clients cloud infrastructure to project specifications
- Contributed to the knowledge base by documenting interactions and sharing valuable insights and best practices.

Amazon Web Services (AWS) **Herndon, VA**
Cloud Support Associate Intern *May 2023 – August 2023*

- Deployed and managed of EC2 instances, incorporating load balancers, auto scaling, and enforcing secure environments.
- Demonstrated expertise in securing a robust VPC infrastructure, ensuring data protection through policy management.
- Proficiently managed and built secure, highly available database servers such as DynamoDB, Aurora, RDS, and Redshift.
- Provided technical support to customers, proficiently troubleshooting and resolving service-related issues.
- Actively participated in case shadowing to deliver timely and efficient solutions.
- Contributed to the knowledge base by documenting interactions and sharing valuable insights and best practices.

Computer Science Internship at George Mason University *June 2019 - August 2019*
Research Assistant

- Updated and redacted research information, digitized data, and ensured proper storage management.
- Conducted research and analysis on social patterns and data, contributing to a better understanding of societal dynamics.
- Acquired a foundation in basic ARC-GIS, employing geospatial analysis techniques to enhance data visualization.

PROJECT EXPERIENCE

- Created iOS and Android platorm App using AWS Amplify SDK: Using AWS Amplify SDK, Developed backend and frontend for a iOS app. The iOS app is integrated with the AppSync API, which interacts with DynamoDB as the backend for data storage, and uses Cognito for authentication. users submit data to be stored in a DynamoDB table for querying. Utilized Amplify CLI, Xcode, Cocoa Pods, Swift. Android: Android Studio, and Node.js.
- In Progress: Stock Market Tracker Dashboard: Creating a Stock Market Tracker Dashboard ETL Pipeline Using Python, AWS Athena for processing. Will be using Tiingo stock API gather real time data and stock changes.
- CS 3214 Personal web and video server Project: Developing a robust and scalable personal web server in C. Aiming to implement HTTP/1.1, file sharing, MP4 streaming and Token based authentication. Going to gain expertise in network protocols, security and concurrent programming.
- CS 3114 Data Structure that supporting 3D point set: Implemented a high-performance data structure supporting range queries in 3D space. Utilized Range Trees and KD-Trees to efficiently compute the number of points within or on the boundary of a given rectangular prism. Achieved optimal time and space complexities
- CS 3114 Kruskal's: Implemented Kruskal's algorithm to compute the cost of the minimum spanning tree and perform k-clustering on a weighted connected undirected graph. Utilized Union-Find data structure with path compression technique to optimize runtime efficiency and achieved accurate results on multiple test cases.
- Personal Website: Built a personal website to showcase my resume and other skills, built using Gatsby, and uses html, CSS, React, JavaScript. Currently in the process of learning how to make custom animations, transitions, and layouts.