VIGNESH VENKATAKUMAR

(716)808-1681 | vigneshv007@gmail.com | linkedin.com/in/vignesh-venkatakumar |
https://vignesh-v-007.github.io/

PROFESSIONAL SUMMARY

Strategic Cloud Data Engineer with extensive experience spanning over four years in AWS infrastructure, specializing in CI/CD methodologies to optimize deployment processes. Proficient in crafting and refining scalable cloud solutions and data/ETL pipelines, significantly boosting operational efficiency and deployment speed. Strong expertise over two years utilizing TrackWise System and Crystal Reports to improve Quality management and deliver insightful reports.

SKILLS

- AWS Services: Advanced proficiency in EC2, S3, Lambda, RDS, IAM, Glue, ECS, CloudFormation, and CodePipeline.
- Database Management: Skilled in SQL (PostgreSQL) and NoSQL (DynamoDB).
- Data Engineering: Expert in ETL processes, data pipeline design, and workflow automation leveraging AWS.
- Programming: Proficient in Python, with extensive use of Boto3 and PySpark for data analysis.
- Orchestration Tools: Experienced with AWS Step Functions and Apache Airflow for scalable data flows.
- DevOps Practices: Knowledgeable in Docker, Git, GitHub, Terraform, IaC with AWS CloudFormation for efficient deployment and MLOps to streamline ML model deployment.
- Quality Management and Reporting Tools: Proficient in TrackWise 8.7 and Crystal Reports for quality management and BI reporting.

EXPERIENCE

Senior AWS Data Engineer, LatentView Analytics, Chennai, India: September 2022 - December 2022
- Constructed APIs, ETL, and data pipelines for vehicle data analysis, cutting down deployment timelines and streamlined insight generation for a leading car manufacturer.
- Streamlined AWS infrastructure deployment with CI/CD, accelerating data processing and analysis by 40%.
- Boosted Urban Mobility Intelligence with detailed analytics on car usage and infrastructure, utilizing AWS serverless systems for increased efficiency.

Cloud Data Engineer, Deloitte, Chennai, India: August 2020 - September 2022
- Enhanced AWS data workflows with automatic tagging and auditing, and integrated Service Now for error handling, speeding up incident resolution.
- Designed and executed advanced ETL workflows with AWS, boosting data processing efficiency by 30%.
- Initiated a Proof of Concept AWS Cloud containerization deploying a Flask application in ECS, ensuring secured access to refined S3 content without direct logins.
- Built and maintained CI/CD pipelines for seamless data product deployments, reducing errors and accelerating delivery by 20%.
- Assisted in deploying critical healthcare systems to AWS leveraging CloudFormation and CI/CD pipelines, reducing deployment timescales by 25% and boosting data reliability.
- Collaborated on migrating PubMed and Embase systems to AWS, optimizing ETL processes and reducing maintenance overheads.
- Facilitated the deployment of OHDSI Atlas software on AWS EC2, improving client satisfaction and project innovation.
- Received a Spot award for exceptional performance for contributions to the Vendor Modernization project, achieving a 30% enhancement in operational efficiency.

Associate, Cognizant, Chennai, India: January 2019 - July 2020
- Enhanced system alerts and automated log capturing through serverless AWS architecture.
- Streamlined data orchestration and delivery utilizing AWS Step Functions.
- Reduced configuration errors by implementing and maintaining rigorous QA processes using HP Quality Center.

Programmer Analyst, Cognizant, Chennai, India: May 2016 - December 2018
- Optimized TrackWise System workflows for major pharmaceutical projects, enhancing process efficiency and system migration outcomes.
- Engineered custom reports with Crystal Reports, advancing project deliverables and heightening client satisfaction through sophisticated reporting solutions.
- Spearheaded documentation, testing, and user access protocols, securing compliance and operational excellence in pharmaceutical company projects.

PERSONAL PROJECTS
- Car Rental Management System: Built web app (Flask & SQL) for efficient car rentals (booking, inventory, customer mgmt).
- Predictive Analytics for Restaurant Success: Developed Flask app using machine learning to predict restaurant ratings & online ordering success, aiding strategic decisions.
- AWS Serverless Insurance Claim Processing System: The system is designed to automate claim submission, evaluation, and processing, integrating a manual approval step for thorough verification and quality assurance.

CERTIFICATIONS
AWS Certified DevOps Engineer Professional - 2022.
AWS Certified Solution Architect Associate - 2019.
Cloud Computing Certification from Great Learning - 2019.

EDUCATION
Master of Science: Data Science, University at Buffalo, The State University of New York, May 2024
- Coursework: Numerical Mathematics, Probability Theory, Statistical Learning and Data Mining, Machine Learning, Data Models and Query Language, Python Programming, Data Intensive Computing.

Bachelor of Engineering: Electrical and Electronics, St. Joseph's College of Engg Chennai, May 2016