Amod Dhopavkar

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EDUCATION

Northeastern University, Khoury College, Boston, MA

Sep 2022 - Jun 2024

Master of Science in Computer Science

GPA: 3.9/4

Coursework: Algorithms, Large Scale Parallel Data Processing, Software Design Patterns, Cloud Computing.

Graduate Teaching Assistant, Programming in C++

University of Pune, India

Aug 2017 - May 2021

Bachelor of Engineering in Information Technology

GPA: 3.8/4

Coursework: Data Structures, Databases, Design & Analysis of Algorithms, Software Engineering, OS, Networks.

• Vice President, Institute of Electrical & Electronics Engineers (IEEE)

SKILLS

LanguagesPython, Java, C++, JavaScript, SQL (MySQL, PostgreSQL), NoSQL (MongoDB, Cassandra), ScalaWeb DevelopmentReact.js, Node.js, Express.js, Flask, Django, REST APIs, GraphQL, Spring Boot, MVC, MVVMData EngineeringMapReduce, Spark, Airflow, Kafka, ETL Pipelines, Data Modelling, Data WarehousingCloud & DevOpsAWS, GCP, Docker, Kubernetes, Ansible, Terraform, GitHub Actions, Jenkins

EXPERIENCE

Software Engineering Co-op

May 2023 - Dec 2023

Addgene Inc.

Boston, MA

- Designed and implemented a Redis caching layer, reducing average API response time by 35%. Containerized and deployed the API using Docker and Kubernetes for streamlined deployment and scalability.
- Developed an ETL pipeline using AWS Lambda to transfer data from an on-prem database to BigQuery via S3, reducing processing time by 60%. Implemented CI/CD with GitHub Actions for easy deployment and monitoring.
- Implemented a scalable and reproducible bioinformatics pipeline using Nextflow, Docker, and AWS Batch, reducing processing time by 60% and enabling the analysis of large-scale genomic datasets.

Data Engineer Aug 2021 - Jun 2022

Quantiphi Analytics

Mumbai, India

- Spearheaded the transition from Elasticsearch to BigQuery, slashing operational costs by 70% while boosting performance metrics by over 30%.
- Implemented a robust monitoring and alerting system using Prometheus and Grafana, enabling proactive issue detection and reducing mean time to resolution (MTTR) by 25%.
- Architected an ETL pipeline utilizing Google Cloud Platform, facilitating real-time data analytics using Looker and improving operational efficiency. Automated deployment and provisioning using Ansible and Terraform.
- Orchestrated complex data processing workflows using Apache Airflow, integrating Spark jobs for real-time data processing and analytics, enhancing efficiency and scalability.

Software Developer Intern

Aug 2020 - Mar 2021

Veritas Technologies

Pune, India

- Enhanced Distributed Block Device kernel module to track data packets leading to a superior packet traceability. Designed CI/CD pipelines reducing deployment time by 40%.
- Implemented Binary Classifier on the data obtained to identify potential outages, decreasing active downtime.

PROJECTS

Kitchen Chronicles: Full-Stack Web App

• Developed MERN stack application for culinary recipes, featuring React front-end with Hooks and Node/Express RESTful APIs. Utilized Redux.js for state management.

Inventory Management System

• Built an E-Inventory Management System utilizing Amazon RDS, enabling efficient product management, order tracking, and reporting.

Money Magnet: Stock Portfolio Management

• Designed Java desktop app following MVC pattern, integrating Alphavantage API for real-time stock data. Demonstrated proficiency in software design patterns.