

# Amod Dhopavkar

617-309-0892 | dhopavkar.am@northeastern.edu | linkedin.com/amoddho2 | amoddhopavkar.me

## 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

**Languages** Python, Java, C++, JavaScript, SQL (MySQL, PostgreSQL), NoSQL (MongoDB, Cassandra), Scala

**Web Development** React.js, Node.js, Express.js, Flask, Django, REST APIs, GraphQL, Spring Boot, MVC, MVVM

**Data Engineering** MapReduce, Spark, Airflow, Kafka, ETL Pipelines, Data Modelling, Data Warehousing

**Cloud & DevOps** AWS, 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 Replicated Block Device (DRBD) 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.