

# Abhi Achalla

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## TECHNICAL SKILLS

<b>Languages:</b>	Java, JavaScript, Python, SQL.
<b>Web Technologies:</b>	React, Angular, GraphQL, Spring boot, Servlets, Node.js, REST APIs.
<b>Databases:</b>	MySQL, SQLite, Cassandra DB, InfluxDB, MongoDB.
<b>DevOps tools:</b>	Docker, Kubernetes, Helm, Ansible, CI/CD (Jenkins).
<b>Other Technologies:</b>	AWS(Lambda, S3, EC2, Serverless), Jira,, version control (Git).

## PROFESSIONAL EXPERIENCE

**Viasat**, San Diego, USA

**May 2023 - Sep 2023**

*Software Engineer Intern*

- Delivered **6+** distributed microservices in Java using Spring Boot with **60%** enhancement in trip management for Viasat mobility; Built the Viasat Maritime portal using ReactJS and JavaScript components managing the state using Redux.
- Ingested live geoSpatial data of **150+** global ships into Cassandra DB leveraging AWS Kinesis data streams.
- Saved **125+** hours of manual efforts using Ansible playbooks by building CI/CD pipelines in Jenkins and automating the updation of flows of 300+ edge sites.
- Migrated **10+** micro-services from on-premise VMs to Docker, improving load speed by **15%**.

**Quickbase**, Boston, USA

**Jun 2022 - Dec 2022**

*Software Developer Coop*

- Built scalable microservices in Java using Spring Boot and architected the Frontend of QuickBase reports using Angular
- Improved the system responsiveness by **50%** by coding an event-driven system using Spring Boot Pub-Sub model in Java for microservice interdependencies.
- Hosted build and release CI/CD pipelines in Jenkins and achieved **92%** coverage with unit tests in JUnit and component integration tests using Mockito.
- Achieved **40%** faster deployment cycle by containerizing Frontend on Docker and deploying with AWS elastic Kubernetes.

**Coastal Soil Engineering (COSECS)**, Vizag India

**Sep 2020 - May 2021**

*Software Developer*

- Developed the backend of COSECS in Java using Spring Boot with a micro-service architecture.
- Integrated the application with AWS Lambda serverless to perform auto updates of the AWS S3 buckets.

**Academy of Skill Development**, India

**May 2020 - Sep 2020**

*Web Application Intern*

- Built a highly scalable web application to provide skill services using React at the Frontend and Node.js at the Backend.
- Leveraged AWS elastic Kubernetes and Helm charts for orchestrating the containerized environment and Karpenter for auto-scaling and performed unit testing using Selenium testing library achieving a coverage of **88%**.

## EDUCATION

**Northeastern University**, Boston, USA

**Sep 2021 - Dec 2023**

Master of Science in Computer Science | **GPA 3.8**

Coursework: Data Structures & Algorithms, Design Patterns, Database Systems, Building Scalable Distributed Systems.

**Gayatri Vidya Parishad**, Vizag, India

**Aug 2017 - Jul 2021**

Bachelors in Computer Science | **GPA 8.3/10**

Coursework: Object-Oriented Programming/Design, Relational Databases (SQL), Cloud Computing, Computing Networking.

## ACADEMIC PROJECTS

**Interactive Adventure Game**

- Devised a game with test driven development (TDD) using Java object-oriented design paradigms. Achieved 98.6% coverage using Junit and refactored code with Facade, Command, Builder, and Singleton design patterns.

**Whiteboarding Game - Multithreaded application**

- Developed a cross-platform app using C++ to allow collaboration in real-time and draw, chat, or poke.
- Increased main-thread performance by implementing multi-threading and resolved concurrent modification exceptions.

**Event-driven Serverless ticketing system**

- Implemented an event-driven system using Apache Kafka and Spring Boot Publish-subscribe model in Java for booking tickets.
- Integrated AWS Serverless Lambda functions to update the S3 buckets timely to maintain consistency.

## ACHIEVEMENTS

**Bright Star 2023 Award** - Viasat Inc, San Diego, CA

- Earned the **Bright Star 2023** award for going above and beyond while developing the Viasat Maritime project for a customer - Vancouver Island Ferry Company.