#### VARSHA CHANDRAHASAREDDY MULANGI

## SOFTWARE DEVELOPER

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#### **SUMMARY**

Versatile Software Engineer with 3 years of experience in C#, .NET Core, ASP.NET, SQL Server, JavaScript, TypeScript, and Angular, specializing in designing secure, scalable backend systems. Proven track record of optimizing performance, enhancing database efficiency, and driving a 30% increase in user engagement at Oregon State University, Accenture, and Infidata Technologies. Skilled in CI/CD, unit testing, and agile development, with a passion for continuous improvement, modern cloud integrations, and shaping innovative product visions.

## TECHNICAL SKILLS

Programming Languages: C#, Java, Python, JavaScript, Typescript, HTML, CSS

Frameworks & Libraries: React, Angular, Redux, Node.js, Express.js, Spring Boot, Django, Bootstrap, GraphQL, Next.js, ASP.NET Core Web API, Apache Kafka, Junit.

API Testing & Tools: Swagger UI, Postman

Database: Azure SQL Database, MongoDB, MySQL, Redis, PostgreSQL, Oracle, Firebase, AWS

DevOps & CI/CD Tools: Docker, Kubernetes, Jenkins

Software Development Tools: Xcode, Visual Studio, Sublime, Eclipse, IntelliJ

Version Control: Git, GitHub, Bitbucket, Azure Devops

#### **EDUCATION**

MS in Computer Science | Oregon State University, OR

Aug 2023 - May 2025

Bachelor of Engineering in Computer Science | Visveswaraya Technological University, India

Aug 2017 - Jul 2021

# PROFESSIONAL EXPERIENCE

# Research Assistant, Oregon State University - Oregon, USA (Remote)

Jun 2024 - Dec 2024

- Engineered SnapStream, an image processing web app using Python, Flask, and JavaScript, enhancing image upload efficiency by 30% with D3.js.
- Seamlessly implemented image processing with **Python's Pillow** (**PIL**), reducing processing time by **25%** and improving output quality by **35%.** Enhanced user experience by **20%** through seamless integration of components.
- Implemented Azure Functions to process images upon upload to Azure Blob Storage, offloading resource-intensive tasks from the main application to the cloud.

## Associate Software Engineer | Accenture, India

Oct 2021 - Aug 2023

- Created a Real-Time Investment Monitoring web app using C#, ASP.NET Core, Angular, TypeScript, Entity Framework Core, and SQL Server.
- Developed a **custom plugin** utilizing J.P. Morgan's proprietary **API** to track users' favorite stocks, providing real-time stock data and resulting in a 30% boost in user engagement.
- Integrated J.P. Morgan's proprietary API into the **Investment Monitoring web app** with ASP.NET Core, enabling secure access to real-time financial data, transaction histories, and account management, which improved data accuracy and streamlined portfolio tracking for users.
- Designed an **Email Notification System** using **Quartz.NET** and **SendGrid** to alert users of stock price changes at predefined thresholds, enabling timely investment decisions and boosting user activity by **20%**.
- Implemented a **real-time dynamic dashboard** using **SignalR** to provide live updates.
- Architected the base security layer for the system using OAuth2 and JWT authentication, enforcing role-based access control and utilizing data encryption protocols, ensuring secure handling of sensitive financial data while maintaining system efficiency.
  Boosted system performance for Accenture's healthcare IT solution by applying clustered and non-clustered indexing to SQL Server tables and stored procedures and
- Boosted system performance for Accenture's nearthcare 11 solution by applying clustered and non-clustered indexing to SQL Server tables and stored procedures and utilizing C# multithreading with native thread pooling and batching in ASP.NET, reducing record processing time by 94.4% for 600,000 records through concurrent processing and asynchronous execution.
- Spearheaded the migration of a legacy financial transaction system from ASP.NET Web Forms to ASP.NET MVC, achieving 95%-unit test coverage using NUnit and Moq, reducing maintenance costs by 15%, minimizing transaction errors, and enhancing system auditability.
- Established a CI/CD pipeline using Azure DevOps and leveraged Jenkins for pre-release testing, automating builds and deployments, reducing deployment time by 50% and improving development workflow efficiency.
- Ensured scalability, high availability, and resilience by implementing the application on **Microsoft Azure**. Configured **SQL Server** for efficient **relational data management**, integrated **Azure Blob Storage** for secure financial report storage, and utilized auto-scaling features. This approach enhanced system performance, improved reliability, and maintained data security.
- Pioneered the setup of **Azure Service Bus** with topics, subscriptions, and asynchronous messaging to establish fault-tolerant, scalable communication between microservices and external APIs, reducing latency by 40% and ensuring reliable real-time stock price updates with enhanced message durability and load balancing.

### Net Developer Intern | Infidata Technologies, India

Mar 2021 - Apr 2021

- Implemented search and filtering functionality for the **Campus Care** web application for school using **C#**, **ASP.NET Core**, **Angular**, **Redux**, **and Tailwind CSS**, enabling efficient sorting of health records by location, metrics, and dates, with real-time data updates for accuracy.
- Refactored and tested **REST API** endpoints in **ASP.NET Core** to enhance frontend data support, improving response times by 20%.
- Collaborated with cross-functional teams to improve codebase quality and documentation.
- Optimized system architecture to align with Azure standards, ensuring scalability and efficiency.

## **PROJECTS**

# **Covid-19 Information Tracker**

Built a COVID-19 Information Portal (using .NET Web API, Angular, SQL), integrating real-time chat (Node.js) and implementing OAuth 2.0 for secure system access.

## Attendance Management System

Developed a real-time attendance tracking system (Python, Flask) with interactive stats using D3.js, automatically calculating fines based on attendance records.

#### E-commerce Application

Developed e-commerce application (Java, Spring Boot, SQL) with secure role-based authentication, enabling CRUD operations and integrating Stripe API for secure online payments.