

Vidya Sagar Reddy Desu

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SUMMARY

Software Developer with over 6 years of enterprise experience plus recent graduate-level expertise in Computer Science. Proficient in diverse technology stacks including Java/Spring Boot and .NET/C#, with demonstrated success in designing REST APIs, GraphQL interfaces, and microservices across banking and telecommunications domains. Successfully led development initiatives that improved system efficiency by up to 40%. Combines strong technical proficiency with proven ability to rapidly adapt to new technologies and collaborate effectively in Agile environments. Known for delivering robust solutions that drive measurable business value while maintaining high quality standards.

EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science

Master of Science in Computer Science | GPA: 3.81/4.00

January 2023 – December 2024

Sreenidhi Institute of Science and Technology, Hyderabad, India

Bachelor of Technology in Computer Science and Engineering

July 2013 – May 2017

TECHNICAL SKILLS

Programming Languages: Java (Advanced), C#, Python, JavaScript, C++, C, PL/SQL

Frameworks & Libraries: Spring Boot (Advanced), .NET (Advanced), Angular, Hibernate, REST APIs, GraphQL

Databases: MySQL (Advanced), Oracle SQL (Advanced), MongoDB, DynamoDB, Redshift, Sybase, Neo4J

Cloud & DevOps: AWS, Azure, Docker, Jenkins, CI/CD, Kubernetes, Maven, TeamCity

Web Technologies: HTML5, CSS3, Microservices Architecture

Development Tools: Git, JIRA, Visual Studio, Figma, IntelliJ IDEA, Spring Tool Suite, Kafka, JUnit, Mockito, Drools, Confluence

Coursework: Advanced Algorithms and Data Structures, Operating Systems, Database Systems, Design Patterns, Cloud Computing

PROFESSIONAL EXPERIENCE

Binghamton University, Graduate Teaching Assistant | Binghamton, NY

August 2023 – December 2024

- Mentored 35 graduate students in advanced database concepts, achieving a 90% pass rate through hands-on AWS services and Neo4J graph database projects while maintaining weekly office hours for individualized support.
- Facilitated 1:1 and small group support through email correspondence and weekly office hours, offering SQL and Python programming guidance to further student comprehension of key course concepts and technologies.

Prime Healthcare Management Inc, IT Analyst Intern | Ontario, CA

September 2024 – November 2024

- Developed a Research Application Portal enabling seamless submission, review, and management of research proposals, incorporating secure email verification, role-specific access, and automated notifications.
- Designed and implemented API logic and database schema, supporting features like multi-facility selection, document uploads, and real-time status tracking using technologies like Azure Blob Storage.
- Streamlined investigator and reviewer workflows by creating user-centric functionalities such as password reset, progress tracking, and comprehensive application review dashboards.

IBM India Private Limited

April 2018 – December 2022

Software Development Engineer, Sales Workstation | Banking Domain | Hyderabad, India

- Led redesign of global trading platform's trade management system, implementing automated workflows that reduced processing time by 40% and enhanced data accuracy for front and middle office sales teams.
- Administered trading for credit and rates products across cash and derivatives, serving as subject matter expert on SWS platform; improved user experience by 25% in inquiry interface through root cause analysis and resolution of systemic issues.
- Ensured 100% accuracy in processing complex financial transactions including trade capture and allocations.

Application Developer, Billing Gateway | Telecommunications Sector | Bengaluru, India

- Architected and implemented 5 high-performance REST APIs processing 100K+ daily requests, enabling seamless migration from legacy systems to new BGW-AYA-Brixton billing platform while maintaining 99.9% uptime.
- Led end-to-end implementation of Bill Charge Preview workflow using Spring Framework, Java/J2EE and CI/CD pipelines; supervised Agile development of optimized microservices generating over 1M accurate customer invoices monthly.
- Facilitated in Agile/Scrum processes, contributing to over 20 sprint planning sessions, daily stand-ups, and retrospectives.

Associate System Engineer, Service Delivery Transformation | Telecommunications Sector | Chennai, India

- Integrated the Enterprise validation system with a rule engine via process-driven architecture for seamless interaction; enhanced EO-EOE-EOV business workflow, achieving a 15% reduction in data validation time while maintaining 100% accuracy.
- Maintained 100% accuracy in validating essential attributes against predefined acceptable values; established a controlled framework for rule execution, increasing validation robustness and providing cumulative results.

ACADEMIC PROJECTS

Stock Price Forecasting | Binghamton, NY

January 2024 – February 2024

- Engineered a machine learning pipeline for real-time stock price prediction achieving 85% accuracy, incorporating multiple data sources and advanced time-series forecasting models using Python and TensorFlow.
- Implemented advanced time-series forecasting models for improved stock trend predictions and generated visual data reports.

AWS - Databricks | Binghamton, NY

November 2023 – December 2023

- Developed SQL Warehouse using AWS CloudFormation Stacks to optimize data management and visualization.
- Created an efficient workflow pipeline for Delta LIVE tables with SQL Warehouse schema, achieving data storage efficiency.

Retail Business Database Management System | Binghamton, NY

April 2023 – May 2023

- Built a menu-driven Java application with JDBC connectivity, contributing to a 100% database interaction efficacy.
- Automated updates and ensured integrity with stored procedures and triggers, achieving a 40% reduction in manual effort.

Simulator for an in-order pipeline for CPU instructions | Binghamton, NY

February 2023 – April 2023

- Built an in-order 11-stage pipeline CPU with an instruction decoder that executed instructions with a forwarding mechanism.
- Simulated with arithmetic instructions and branching instructions that resulted in over 25000 cycles.

PERSONAL PROJECTS

NumVana (<https://numvana.onrender.com>) | Binghamton, NY

August 2024 – December 2024

- Developed NumVana, an interactive web-based number guessing game using Spring Boot and JavaScript, implementing a dynamic difficulty system with unique number generation and real-time game mechanics.
- Created a responsive single-page application with advanced features including dark/light mode, sound toggle, game statistics tracking, and an engaging user interface with animated floating numbers and progress indicators.

BlogAlchemy | Binghamton, NY

September 2024 – October 2024

- Developed BlogAlchemy, an advanced Spring Boot blogging platform featuring role-based authentication, dynamic post scheduling, and a nested comment system.
- Implemented a full-stack web application using Thymeleaf, Spring Security, and JPA/Hibernate, showcasing proficiency in modern web development frameworks and technologies.

CERTIFICATION AND ACHIEVEMENTS

- Awarded Microsoft Azure Fundamentals certification in April 2021, gaining cloud expertise in Azure services.
- Drove innovative solutions spearheading major service transformation resulting in IBM 2020 "Service Excellence Award"
- Honored with IBM 2019 "Best Graduate Hire Award" as top performer among 350+ recent graduate hires.