

Vidya Sagar Reddy Desu

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EDUCATION

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

Master of Science in Computer Science

January 2023 – May 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: C, C++, Java, JavaScript, Python, PL/SQL

Web and Cloud Technologies: CSS, HTML, Amazon Web Services (AWS), Azure

Frameworks/Library: Spring boot, REST API's, Hibernate, React JS

Databases: MySQL, Oracle SQL, MongoDB, DynamoDB, Redshift, Sybase, Neo4J

Tools: IntelliJ IDEA, Git, JIRA, Jenkins, Docker, CI/CD, Kubernetes, Maven, Teamcity, Visual Studio Code, Spring Tool Suite

Others: Agile methodologies, Microservices, Software Development Life Cycle, Kibana, 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 – Present

- Guided 35 students through lab sessions, quizzes, and assignments, fostering deeper comprehension of the curriculum while elevating student learning through hands-on AWS services and graph database projects, illustrating practical course concepts.
- 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.

IBM India Private Limited

April 2018 – December 2022

Sales Workstation, Software Development Engineer | Hyderabad, India

- Managed trade management system design and product development cycles for front and middle office sales teams; enhanced efficiency by 40% through procedure overhaul within the SWS global trading platform.
- 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.

Billing Gateway, Application Developer | Bengaluru, India

- Designed and developed 5 scalable REST APIs to securely extract customer data from legacy systems, enabling accurate billing for new BGW-AYA-Brixton platform; conducted comprehensive regression testing and UAT across interfaces.
- 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.

Service Delivery Transformation, Associate System Engineer | 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.

PROJECT EXPERIENCE

Stock Price Forecasting | Binghamton, NY

January 2024 – February 2024

- Conceptualized effective data retrieval techniques to acquire historical stock data, ensuring data integrity, validity, consistency.
- 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.

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.