Sai Krishna Varakala

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EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering **Binghamton, NY**
Master of Science in Computer Science, GPA: 3.75/4.0 *Dec 2023*
Related Coursework: Operating Systems, Computer Organization & Architecture, Design and Analysis of Algorithms, Programming Languages, Database Management Systems, Design Patterns, Software & Engineering Project Management, Introduction to Computer Security

Chaitanya Bharathi Institute of Technology (A), Osmania University **Hyderabad, India**
Bachelor of Engineering in Electrical and Electronics Engineering *Aug 2015 - May 2019*

TECHNICAL SKILLS

Languages: Java SE 8, Python, C, C++, NodeJS, JavaScript, Typescript, HTML, CSS, Bootstrap
Databases: Oracle, MySQL, MS SQL Server, PostgreSQL, MongoDB
Frameworks, Libraries & Tools: Spring framework(IOC, AOP, ORM, JDBC, MVC, others), SpringBoot, Microservices, Spring Security, LDAP, Hibernate, Apache Maven, Junit, JSON, PMD, Angular 9, ReactJS, REST API,JQuery, Apache NiFi, Tomcat, Kafka, GITHUB, Microsoft TFS, Bitbucket, DevOps, Agile, Jenkins, CI/CD, Postman, Keycloak, Windows, Linux, Microsoft Office, FlexSim, AWS, PowerBI, Docker, Jira, MATLAB
Certifications: Infosys Certified Java Programmer, Infosys Certified Spring Professional, Infosys Certified MySQL Associate

PROFESSIONAL EXPERIENCE

Graduate Grader, Department of Computer Science | Binghamton *Aug 2023 - Present*
- Assessed assignments for 150 graduate students across six distinct coursework modules, providing timely and actionable feedback to support academic excellence
- Guided students in debugging and error-checking their code, resulting in a 25% decrease in the number of coding errors made by students

Innovation Associates (iA), Graduate Research Associate | Binghamton *May 2022 - Dec 2022*
  Machine Emulator/Digital Twin project: Developed the machine emulator/digital twin application by collaborating with simulation team, resulting in a 10% decrease in development cost for NEXiA
- Integrated station-level and system-level testing into the machine emulator application, leveraging VB.NET, MS SQL Server, ReactJS, Node.js, Docker, and AWS. Reduced testing time by 65%, ensuring efficient and accurate evaluation of small-scale and large-scale systems
- Incorporated past performance tracking using historical data and simulated error scenarios to scrutinize system performance in the digital twin application for NEXiA software testing, leading to a 40% enhancement in application stability and reliability

Infosys Limited, Systems Engineer | Hyderabad, India *Dec 2019 - Dec 2021*
- Achieved a 92% aggregate in the Infosys Foundation Program and was honored as "GEC Star 2020"
  Infosys Database Migration (iDM) Platform: Developed a web-based database migration tool to migrate databases, resulting in a 45% increase in efficiency compared to manual migrations. Improved application performance by 50%
- Secured the application with Spring Security and Keycloak, configured LDAP for the application, and created customized solutions from scratch to meet specific business requirements, resulting in zero security breaches or incidents
- Built core REST APIs using Spring Boot framework, Hibernate, Swagger and responsive web pages using Angular 9
- Integrated different approaches in Apache NiFi to improve data migration speeds resulting in a 60% reduction in migration time for databases and also added support for complex data types like BLOB, CLOB and others
  EKart Application (e-commerce website): Reviewed and refactored the EKart Application's codebase to meet business objectives. Enhanced the application by introducing a shopping cart, payment gateway, and additional functionalities
- Streamlined deployment process resulting in a 65% reduction of deployment time compared to manual deployment process
- Served as Automation Anchor, Led the automation of deployment processes by leveraging DevOps principles
- Configured multiple Jenkins (CI/CD) pipelines for testing, building the application, generating JAR files, and deploying them on servers. This increased deployment speeds by 60% while maintaining optimal performance

PROJECT EXPERIENCE

The Movie Database (TMDb) Analysis & Recommendation System, Binghamton University
- Analyzed 50,000+ data entries using Python and MongoDB to find trends, used these insights to build a movie recommendation tool that suggests films by title and genre.

Smart Agriculture, Chaitanya Bharathi Institute of Technology
- Recognized as the "Best Project of the Department" for the year 2018-2019
- Created an IoT-based field monitoring system for agriculture fields, enabling timely watering based on moisture levels. Implemented SMS alerts and portal updates for better user experience and enhancing productivity. Reduced water wastage by 40% and improved crop yields by 30%