Rahul Podugu

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SUMMARY

Graduate student in Computer Science with 2+ years of experience in designing scalable distributed systems and efficient software solutions. Strong in algorithms and data structures, with a focus on innovation and user-centric design. Eager to contribute to dynamic teams that prioritize creativity, collaboration, and growth.

EXPERIENCE

- **Graduate Fellow / Graduate Student Worker** — BwTech@UMBC
  Aug 2022 - May 2023 — *Baltimore, MD*
  - **UI Design & Backend Development**: Developed a user-friendly interface using Angular, HTML, and CSS, and built backend services with Node.js to enhance user interaction and system integration.
  - **Pitch**: Presented 'Virtual Apprentice' at TEDx, receiving insightful feedback and enhancing visibility.

- **Software Developer** — UST
  Sept 2021 - Jun 2022 — *Bangalore, India*
  - **Payment Module**: Led the development of a payment module using Kafka for event streaming, Java for core functionality, and Saga orchestration for managing distributed transactions. Ensured system reliability and data consistency.
  - **Microservices**: Designed and implemented microservices with Spring Boot to enhance system scalability and modularity. Improved REST API integration using JSON for seamless and efficient data exchange between services.
  - **Accuracy Improvement**: Increased inventory accuracy by 25% via robust integration of REST APIs.
  - **Automated Testing**: Led the implementation of automated testing frameworks with Selenium and TDD, using JUnit and Mockito, reducing manual efforts by 75% and increasing productivity by 20%.
  - **Agile Methodologies**: Spearheaded SDLC methodologies to shorten release cycles, decrease time-to-market by 30%, and enhance team efficiency by 25%.

- **Analyst Intern** — Fidelity National Financial
  Apr 2021 - Aug 2021 — *Bangalore, India*
  - **Data Conversion Project**: Played a key role in cloud migration, addressing bugs with Java and SQL. Enhanced data quality by 50% and reduced errors by 25% through targeted improvements.
  - **Data Extraction**: Developed a Java-based data extraction solution, reducing extraction time by 30%.
  - **Performance Enhancement**: Enhanced performance with optimized Java code and Hibernate, reducing crashes by 40% and improving response time by 25%.
  - **CI/CD**: Implemented CI/CD pipelines with Jenkins, Docker, Kubernetes, and YAML for configuration, resulting in a 20% reduction in deployment time and streamlined release processes.

SKILLS SUMMARY

- **Programming Languages**: JavaScript, TypeScript, C, C++,C#, Python, Java
- **Web Development**: Angular, Spring Boot, REST-API, HTML/HTML5, CSS/CSS3, jQuery, SOAP-XML, Node.js,
- **Quality Assurance**: Selenium, TestNG, TDD, BDD, JUnit Cucumber, Postman
- **Data Management & Analysis**: PostgreSQL, SQL, Oracle, MongoDB, Data Analysis, Kafka
- **Agile Development**: Agile Methodologies (Scrum/Kanban), SDLC, Jira, Git
- **Tools & Frameworks**: Docker, Kubernetes, Azure, AWS, Maven, Hibernate, Jenkins, React.js, AJAX

PROJECTS

- **Microservice Architecture for E-commerce Platform**: Engineered a microservice-based architecture for an e-commerce platform, enhancing scalability and maintainability. Implemented services for user management, product catalogue, and order processing using Spring Boot and Docker, with seamless API integrations and improved system performance. **Tech**: Java, Spring Boot, Docker, REST APIs

- **Peer-to-Peer Secured File System**: Engineered a high-performance peer-to-peer file-sharing system that outperformed other submissions by more than 3 times in benchmark tests. Implemented encryption with RSA to ensure data security and privacy. Deployed on Linux, demonstrating expertise in distributed systems. **Tech**: Java, Encryption, RSA, Linux, Distributed Systems

EDUCATION

- **University of Maryland Baltimore County** — Maryland, USA
  Master of Science - Computer Science — *Aug 2022 - May 2024*

- **Amrita Vishwa Vidyapeetham University** — Kollam, India
  Bachelor of Engineering - Computer Science — *Jul 2017 - Jul 2021*

PUBLICATIONS

- **Remote Medical Assistance for Marine Fishermen through OceanNet**: 2021 12th International Conference on Computing Communication and Networking Technologies (ICCCNT), Kharagpur, India, 2021, pp. 1-5. doi: 10.1109/IC-CCNT51525.2021.9579678.