Sukanya Rani

(480)-787-7901• srani6@asu.edu • github.com/suk-7 • linkedin/sukanyarani
Backend Software Developer | Java Developer | Spring Boot | APIs , AWS, MongoDB, JavaScript

EDUCATION

Masters in Software Engineering   Expected December 2025
Ira A. Fulton School of Engineering, Arizona State University, Tempe, AZ
Coursework: Software Design, Software Agility, Emerging Languages and Programming Paradigms

B.E. Information Science and Technology   August 2021
Sapthagiri College Of Engineering, Bangalore, India
Coursework: Data Structure and Application, Operating System and Web Technology

TECHNICAL SKILLS

Back-End : C/C++, JAVA, Advanced Java, Microservices, Python, PL/SQL, SQL, MongoDB
Front-End : HTML, CSS, JavaScript, React.JS
Frameworks : Collection Framework, Spring Boot, Spring MVC, RestAPIs
Technologies : GIT, GitHub, AWS, IoT, Junit, OAuth2, Docker, Unity 3D

WORK EXPERIENCE

WP Carey School of Business, Arizona State University: Simulation Developer   April 2024 - Present
- Utilized Forio Epicenter and **JavaScript** to maintain and optimize an **educational game** for university students, increasing operational efficiency and user engagement.
- Maintained a high-performance data collection simulation capable of processing over **5,000 requests** per second with **99.99%** data accuracy, aiding in research and analysis of supply chain policies and incentives.
- **Migrated legacy files** to a modern app framework leveraging **Java** and Android technologies, ensuring compatibility with current devices and **revising performance** while gaining in-depth understanding of app's functionality.

Tata Consultancy Services, Bangalore: Systems Engineer   August 2021- December 2023
- Created robust and secure **Backend For Frontend (BFF)** and **RESTful APIs** to improve application performance and security, using **Java Spring Boot**, **Spring JDBC**, and **OAuth2**, that resulted in efficient business logic implementation increasing **throughput by 250%.**
- Analyzed and re-designed back-end of an old application to **eliminate redundancies** and bottlenecks using optimization techniques, which resulted in a **35% reduction in procedure calls** and database transactions.
- Achieved over **50% cost savings** by migrating an existing application from a mainframe to **AWS cloud** services (**EC2, S3, Lambda, Fargate, ELB**) ensuring seamless integration and revamped execution for increased user traffic volume.
- Extracted and analyzed **Oracle database** components to optimize the workflow utilizing Oracle Forms Builder and Reports Builder, resulting in enhanced **data management**.

ACADEMIC PROJECTS

ASU Software Agility Project, Taiga API Integration *link*   April 2024
- Developed and consolidated Taiga APIs with **Java Spring Boot** to track various work metrics, utilizing separate **microservices architecture** and **Docker containerization** for consistent environments.
- Implemented containerized **microservices deployment** on an Azure server, improving scalability, maintenance, and operational efficiency, while harnessing cloud capabilities to enhance project tracking and performance.
- Created a full-stack project with **JavaScript** and **React** for frontend, **Java** with **Spring Boot** for backend, synthesizing dynamic graphs from backend data, and following Agile methodologies with **GitHub.**

Smart Parking Systems, Internship Project   March 2021
- Constructed an **IoT-based Smart Parking System** with real-time monitoring of parking slot availability operating **Arduino UNO** and **NodeMCU ESP8266.**
- Seamlessly integrated the Blynk mobile app to enhance user convenience, aiding in locating nearby parking options.
- Improved parking experience by providing **real-time updates** on parking availability, streamlining process and boosting user convivence.