VASUDHA MADDI

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SKILLS

Programming & Scripting: Java, Python, PL/SQL, SQL, Oracle 12c/19c, REST APIs
Frameworks & Tools: Spring Boot, JPA, Hibernate, JUnit, Mockito, Git, Log4j
Databases: PostgreSQL, MySQL, Oracle (12c/19c), MongoDB
Cloud & DevOps: AWS (EC2, S3, RDS), Docker, Kubernetes, Jenkins
UI/UX Tools: HTML, CSS, JavaScript, Bootstrap, Mockups (Figma)
Tools & Methodologies: Agile (Scrum), Jira, Confluence, GitHub, SDLC, Unit Testing, Integration Testing, Functional Spec Writing

PROFESSIONAL SUMMARY

Master's graduate in Computer Science from the University of Central Florida with hands-on experience in backend development, cloud deployment, and applied machine learning. Proficient in Java, Spring Boot, RESTful APIs, and AWS, with academic project work in computer vision and natural language processing. Detail-oriented, quick to learn new technologies, and motivated to contribute to research-driven and impact-focused teams.

EDUCATION

- **M.S. in Computer Science – 3.69/4(GPA)**　　　　　　　　　　　　　　　**Fall 2023 – Spring 2025**
  University of Central Florida, Orlando, Florida

  Relevant coursework: Advanced Computer architecture, Design & Analysis of Algorithms, Advanced Software System Security, Computer Understanding of Natural Language, Computer Vision, Machine Learning

- **B.E (Electronics and Communication Engineering) – 7.6/10 (CGPA)**　　　　　　　　　**2021**
  Osmania University, Hyderabad, Telangana, India

  Relevant coursework: Computer Programming and Problem Solving, Applied Mathematics, Computer Organization and Architecture, Database Systems, Data communication and computer networking, Data Science using R Programming

ACADEMIC PROJECTS

Real-Time Facial Emotion Recognition| Orlando, FL 2024
Developed a real-time emotion detection system using CNN and ResEmoteNet architectures, integrating OpenCV for video-based facial expression analysis. Achieved 62.6% accuracy on the FER2013 dataset through model optimization and augmentation.

Spam Email Detection| Orlando, FL 2024
Designed and implemented a spam classification pipeline utilizing TF-IDF for feature extraction and multiple ML algorithms including SVM, Naive Bayes, and ensemble Voting Classifier. Achieved over 98% accuracy using GridSearchCV for hyperparameter tuning.

Pension Management System | Chennai, India 2021
Engineered a microservice-based pension management application using Spring Boot and Spring Security for secure API design. Built responsive UI components with HTML, CSS, and Bootstrap, enhancing user experience and administrative efficiency.

EXPERIENCE

Cognizant Technology solutions, Hyderabad, India　　　　　　　　　　　　　　**Aug 2021 – July 2023**
Junior Software Engineer
- Architected robust microservices using Spring Boot and MongoDB, improving system throughput and scalability.
- Designed responsive React.js applications, enhancing usability and user engagement.
- Secured platforms with JWT-based authentication, notably reducing security incidents.
- Analyzed performance bottlenecks and contributed to system scalability through Docker/Kubernetes optimizations.
- AWS-based infrastructure (EC2, S3, RDS), optimizing application availability and resource usage.
- Delivered comprehensive test suites using JUnit and Mockito, significantly shortening QA cycles.
- Collaborated with product owners to gather and document functional and technical requirements for microservices.

Cognizant Technology Solutions, Chennai, India　　　　　　　　　　　　　　**Jun 2021 – Aug 2021**
Programmer Analyst Trainee
- Developed microservices using spring boot and implemented Swagger for documenting Rest API
- Configured Spring Security in application to secure the method calls and restful webservices
- Developed java scripts for all client validations and developed User Interface using HTML5, CSS3, Bootstrap
- Developed test cases with Junit, Mockito for Unit testing and logging using Log4j
- Deployed the application on Amazon Web Services (AWS)
- Performed GitHub/GitHub-Desktop bash and terminal commands to clone, fetch, merge and push the code and created pull requests for the changes that are made

CERTIFICATIONS

- AWS Certified Solutions Architect – Associate　　　　　　　　　　　　　　　　**2025**