SATHVIKA BALABHADRA

sathvikabalabhadra01@gmail.com (602) 318-6802 Sathvika-Balabhadra Sathvika-Balabhadra Tempe, AZ

EDUCATION

Arizona State University, Tempe **August 2023 - May 2025**
Master of Science in Information Technology GPA - 3.9 / 4.0
Coursework: Data Visualization, Advanced Big Data Analytics, Advanced Database Management Systems, NLP, AI in Cybersecurity, Information Systems Development, Cloud Architecture.

Chaitanya Bharathi Institute of Technology, India **August 2018 - June 2022**
Bachelor of Engineering in Computer Science & Engineering GPA - 7.69 / 10
Coursework: Data Structures and Algorithms, Machine Learning, Artificial Intelligence, Operating System, DevOps, Software Engineering, Object Oriented Programming(OOP).

SKILLS

Programming Languages: Python, C, SQL, Java, C#, HTML5/CSS3, JavaScript, Bash.
Web & Frameworks: ReactJS, Angular, Flask, Django, Spring Boot, Pandas, NumPy, TensorFlow, PyTorch, RESTful API.
Cloud & DevOps: AWS (EC2, S3, Lambda, API Gateway, IAM, DynamoDB), Azure, Docker, CI/CD, Kubernetes, Linux.
Tools & Databases: MySQL, PostgreSQL, Git, JIRA, Databricks, PowerBI, MongoDB, Kafka, DOORS, Agile/Scrum, SDLC.
Soft Skills: Communication, Team Collaboration, Curiosity & Continuous Learning, Ethical Judgement, Project Management.

CERTIFICATIONS

AWS (Amazon Web Services) - Certified Solutions Architect – Associate **April 2025 - April 2028**

WORK EXPERIENCE

Software Engineer **September 2023 - Present**
Arizona State University Tempe, USA
- Engineer an Inventory Tracking System using Python, Django, & React, enabling real-time stock monitoring across multiple locations, integrating cloud databases & REST APIs for seamless data flow, and reducing inventory discrepancies by 35%.
- Build and fine-tune predictive inventory forecasting models using Pandas and Scikit-learn, boosting stock replenishment accuracy by 25% and minimizing overstock issues across multiple warehouse sites.
- Collaborate in Agile development cycles by leading daily stand-ups, participating in sprint planning, submitting Jira-based reports, and advancing project delivery efficiency by 20% through elevated team coordination.

Associate Software Developer **February 2021 - July 2023**
Rockwell Collins Hyderabad, India
- Coordinated daily software verification tasks, assignments, and project schedules, increasing team productivity by 25% and minimizing project downtime by 15% across Boeing's flight control system programs during peak delivery cycles.
- Developed and implemented Python automation strategies that reduced manual testing time by 40%, strengthened code quality by 30%, and decreased rework-related defects by 30% within a six-month period.
- Led cross-functional collaboration engineering teams to identify root causes of software defects, implement corrective actions, and drive a 15% increase in verification workflow efficiency while ensuring full compliance with aerospace safety regulations.
- Spearheaded efforts to enhance requirement traceability within IBM DOORS, converting over 200 customer needs into testable system requirements and elevating traceability coverage by 20%, improving project readiness and system robustness.
- Optimized project workflows by redesigning verification processes and refining material handling efficiencies, resulting in a 20% cut in verification cycle times and enhanced team performance.
- Earned recognition for outstanding contributions through Collins' "Making a Difference" program by successfully managing quality control initiatives that led to substantial cost savings and advanced customer satisfaction.

PROJECTS

Movie Recommender | Django, Python, Pandas, AWS S3, Heroku, HTML, CSS, JavaScript
- Built a full-stack movie recommendation system employing Collaborative Filtering, improving recommendation accuracy by 40%. Structured user authentication, movie search, and watchlist features, enhancing platform usability by 30%.
- Optimized backend performance by minimizing SQLite query response time by 25% and integrating AWS S3 for static file storage, cutting load times by 20% and achieving 99.9% uptime on Heroku for seamless accessibility.

Crop Disease Detection | Python, HTML, Pandas, Scikit-learn, OpenCV
- Redesigned a crop disease detection website using NLP-based text classification, upgrading diagnostic accuracy by 80%.
- Refined platform's usability, increasing farmer engagement by 50% through a streamlined and accessible web interface.
- Implemented an image captioning system with OpenCV, shrinking manual disease identification efforts by 30%.