Mythri Shivakumar

mythrish@buffalo.edu | (716)-319-4689 | GitHub | LinkedIn | Portfolio| USA : Open to Relocate

SUMMARY

Software Engineer with strong background in algorithms, data structures, and large-scale software development. Experienced in building cloud-native platforms, distributed systems, and full-stack applications using Python, C++, Java, and JavaScript. Skilled in Unix/Linux environments, data-intensive computing, and machine learning, with proven ability to design, test, deploy, and maintain resilient software systems. Passionate about scalable engineering and solving complex technical challenges.

EDUCATION

University at Buffalo, The State University of New York,   New York, USA
Masters in Computer Science and Engineering   *August 2024 – December 2025 (Expected)*
Jawaharlal Nehru Technological University,   Hyderabad, India
Bachelors in Computer Science and Engineering   *July 2018 – August 2022*

SKILLS

Programming Languages: Python, C++, Java, JavaScript, C, Scala, SQL, HTML, CSS
Web Development & Frameworks: React, Flask, Django, Node.js, REST APIs
Software Development: Full-Stack Development, Microservices, CI/CD, Agile (Scrum)
Systems & Platforms: Unix/Linux , Distributed Systems, Parallel Computing, Docker, Kubernetes, AWS, GCP, Azure
Data Engineering: PySpark, ETL Pipelines, Hadoop, Kafka, MongoDB, PostgreSQL
Machine Learning & AI: Neural Networks, NLP, Transformers, CNNs, Deep Learning, TensorFlow, PyTorch
Other Skills: Accessibility (WCAG/ARIA), Monitoring/Logging, Data Visualization (PowerBI, Tableau)

WORK EXPERIENCE

Infosys,   Hyderabad, India
Software Development Engineer   *August 2022 – May 2024*
- Engineered scalable distributed ETL pipelines on AWS with PySpark and MongoDB, processing 1,000+ data files/month and reducing manual handling by 80%.
- Refactored 40+ legacy Unix shell pipelines into modular Python frameworks with reusable components, improving data consistency and reducing failures by 60%.
- Enhanced internal orchestration libraries, cutting onboarding time for new workflows by 50% and improving system maintainability.
- Integrated automated validation, monitoring, and recovery logic to improve pipeline reliability by 30%.

Freelance   Hyderabad, India
Software Developer & Blogger   *August 2020 – August 2022*
- Developed web applications and prototypes for multiple startups using React, Flask, Node.js, and Python.
- Created technical blogs and tutorials to explain AI/ML concepts, improving reach and engagement for tech communities.
- Designed interactive dashboards and data visualizations using Pandas, NumPy, Tableau, and PowerBI for client projects.

TECHNICAL PROJECTS

Share Cycle   *React, Flask, Firebase, Python, Geolocation APIs, REST APIs*
- Developed a mobile platform connecting women in need with nearby volunteers to access sanitary products, enhancing community health and support.
- Implemented user registration, geolocation-based matching, and real-time notifications.
- Integrated secure authentication and optimized API queries for performance.

Emotion-Based Music Player   *Python, TensorFlow, VGG16, OpenCV, Deep Learning, Pandas*
- Developed a cross-platform music player with real-time emotion detection from facial images, dynamically adapting music playlists to user mood.
- Engineered modules for emotion recognition, song classification, and playlist management.
- Achieved 95% precision in emotion detection.

Scalable Task Management Platform   *React, Flask, PostgreSQL, Python, REST APIs*
- Designed and implemented a productivity-focused platform for task management and collaboration.
- Built secure authentication and optimized API queries for efficiency.
- Focused on modular architecture for maintainability and scalability.

AWARDS, CERTIFICATIONS & PUBLICATIONS

Awards: Infosys Insta Rise Award, Alpha Microsoft Learn Student Ambassador, Winner - UB Hacking 2025
Certifications: AWS Academy Graduate – AWS Academy Cloud Foundations; Microsoft Certified: Azure Developer Associate; Microsoft Certified: Azure Fundamentals
Publication: Cognitive Natural Language Processing Assistant for Post Operative Care, IRJCS Vol 8, June 2021.