Saikannan Sathish

Binghamton, NY | (607) 621-8860 | ssathish2@binghamton.edu | LinkedIn | Github | Portfolio

EDUCATION

Binghamton University, State University of NY, Thomas J. Watson College of Engineering and Applied Science
Master of Science in Computer Science (Artificial Intelligence) *Expected May 2026*
Cumulative GPA: 3.50/4.00

Sri Ramachandra University, Sri Ramachandra Faculty of Engineering and Technology
Bachelor of Technology in Computer Science Engineering (Artificial Intelligence and Machine Learning) *July 2024*
Cumulative GPA: 3.69/4.00

TECHNICAL SKILLS

Languages: Python, Java, C, C++, Dart, JavaScript, R
Machine Learning & NLP: TensorFlow, PyTorch, Scikit-learn, Statsmodels, OpenCV, Pandas, NumPy, SciPy, Matplotlib
Frameworks: Next.js, Django, React.js, Flutter
Testing Tools: Robot Framework, Selenium, TestNG, POM
Databases & Developer Tools: MongoDB, PostgreSQL, MySQL, Firebase, Git
Web/Mobile Development: HTML5, CSS3, Tailwind CSS
Core: Machine Learning, Deep Learning, Data Science, NLP, Automation Testing, Data Structures and Algorithm Design
Cloud Platforms: AWS Academy Graduate, Azure

PROFESSIONAL EXPERIENCE

Uplifty AI, Machine Learning Engineer Intern | Texas, USA *August 2025 - Present*
- Developed and deployed ML models for content feed personalization and moderation using NLP, deep learning, recommendation systems, and data-driven insights
- Implemented cold start strategies and optimized ranking algorithms, improving accuracy and coverage
- Designed API input/output specifications and integrated models into production with Google Cloud Run
- Built scalable data pipelines for preprocessing, feature engineering, and low-latency inference
- Conducted A/B testing and performance analysis with Matplotlib and Tableau to refine recommendations

iTechnowiZ Solutions, Automation Test Engineer Intern | Chennai, India *March 2024 - June 2024*
- Implemented Page Object Model (POM) in Selenium, improving automation efficiency by 35%
- Automated 500+ test cases, enhancing regression test coverage by 40%
- Developed reusable automation scripts using Python and Robot Framework, reducing manual effort
- Collaborated with development team in an agile environment to align automation coverage with client requirements

Verzeo, AIML Engineer Intern | Bangalore, India *December 2022 - February 2023*
- Developed a real-time hand gesture recognition model using TensorFlow and OpenCV
- Implemented object detection API, improving gesture recognition accuracy by 92%
- Utilized OpenCV, TensorFlow, LabelImg, and the Object Detection API in the development process
- Worked closely with cross-functional teams to integrate the model into application workflows, ensuring alignment with stakeholder needs

Qurinom Solutions, Mobile App Developer Intern | Hyderabad, India *January 2022 - March 2022*
- Developed PILGRIM, a Travel App, using Flutter and Firebase, implementing state management and authentication
- Designed and optimized NoSQL database structure in Firebase Firestore for improved data handling
- Gained exposure to relational databases - MySQL and PostgreSQL to understand backend data flows while integrating mobile app features
- Partnered with product managers, designers, and engineers to refine app features and enhance end-user experience

PROJECT EXPERIENCE

Hybrid Knowledge Assistant: Full-Stack RAG System | Independent Project | Github *Oct 2025 - Present*
- Building a full-stack RAG system using FastAPI, Supabase (PostgreSQL + pgvector), and Next.js 14 with document ingestion, chunking, embeddings, semantic search, and LLM-based answering
- Developing backend endpoints (/ingest, /ask) for PDF/TXT uploads, embedding generation, pgvector similarity search, and citation extraction
- Implementing a frontend with file upload, chat interface, citations, confidence scoring, and OpenAI-powered embeddings and generation with optional offline fallback

Diabetes Prediction: AI-Powered Health Analytics | Independent Project *Jan 2024 - March 2024*
- Developed and trained an Artificial Neural Network (ANN) in Python using TensorFlow and Scikit-learn, achieving 85% accuracy on a medical dataset of 10,000+ patient records with improved predictive reliability
- Preprocessed medical datasets using Pandas and Scikit-learn (feature scaling, normalization, missing value imputation, outlier detection), improving data quality, consistency, and model stability
- Optimized hyperparameters (learning rate, activation, optimizer) with GridSearchCV and k-fold cross-validation, evaluating model performance using confusion matrix, precision, recall, and F1-score to enhance model accuracy, generalization, robustness, and reduce overfitting