Sachet Ranjan Bisi

Education

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New York University

May 2025

Master of Science in Computer Engineering

New york City, NY

• Relevant Coursework: Machine Learning, Artificial Intelligence, Internet Protocols, Network Security

University of Illinois

May 2023

Bachelor of Science in Computer Engineering

Chicago, IL

• Relevant Coursework: Data Structures, Computer Vision, Systems Programming, Computer Architecture

Technical Skills

Languages: Python, Java, JavaScript, C++, HTML, CSS, SQL

Developer Tools: VS Code, Git, JUnit, PyTest, Jupyter Notebook, Postman, Jax

Technologies/Frameworks: TensorFlow, PyTorch, Scikit-learn, Keras, Pandas, NumPy, OpenCV, NLP, Transfer Learning, LLM Integration, AWS (S3, EC2, Transcribe), GCP, Docker, Kubernetes, Jenkins, Spring Boot, React, Django REST, Firebase, RESTful APIs

Experience

Viabot May 2024 - August 2024

Software Engineer Intern

Remote

- Refined server-side components using Spring Boot, boosting system throughput by 60% and cutting latency by 75%.
- Developed Python automation scripts for data migration, reducing execution time by 30% and minimizing errors.
- Built and integrated RESTful APIs with three major third-party platforms, cutting integration time by 40% and improving featured evelopment cycles.
- Led thorough unit and integration testing using JUnit and PyTest, achieving 95% code coverage and lowering bug rates by 35%.
- Collaborated with cross-functional teams in Agile sprints to accelerate deployment timelines by 20%.

University of Illinois at Chicago

May 2022 - December 2022

 $Computer\ Engineering\ Intern$

Chicago, IL

- Engineered circuit designs for an IR thermal camera using Fritzing, enabling precise wiring and seamless hardware integration.
- Assembled and aligned components with a custom 3D-printed shutter on a perma-proto breadboard through precision soldering.
- Partnered with a five-member team to identify and resolve circuit issues, increasing system reliability by 30%.
- Contributed to prototype optimization by pinpointing key design faults, reducing production errors and improving overall effectiveness.

Projects

LLM-Powered Medication Verification

October 2024

- Developed a multi-modal text extraction pipeline using Python OCR APIs and AWS Transcribe, increasing accuracy by 25% inprocessing images, ED notes, audio, and handwritten clinical notes.
- Optimized medication data organization with advanced prompt engineering using Gemini LLM, reducing reconciliation time by 50%.
- Architected high-performance backend REST APIs with the Django REST framework, improving response times by 60% andenhancing system efficiency for an Android application.

Food Classification Deployment Track

December 2023

- Maximized a food classification model using Transfer Learning with MobileNetV2, achieving 88% accuracy.
- Led the project from planning to deployment, utilizing Docker and Kubernetes to reduce resource utilization by 17%.
- Improved scalability and addressed deployment bottlenecks, enhancing response times by 85% and increasing overall project efficiency.

Beep Baseball May 2023

- Researched and authored the project proposal, contributing to a team that secured \$250 in funding for the project.
- Conducted rigorous testing on electrical components and collaborated with engineers to identify and resolve critical issues, reducing potential production errors by 30% and enhancing product reliability.

Neural Network Application

December 2022

- Implemented a perceptron training algorithm for image classification, achieving 92% accuracy on validation datasets.
- Optimized curve fitting using backpropagation, reducing error by 86%, and built a Python-based shape classification model, improving efficiency by 89%.