

Samuel Jeromiah

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EDUCATION

Northeastern University

GPA: 4.0

Khoury College of Computer Sciences, Master of Science in Artificial Intelligence

Related courses: Foundation of A.I, Algorithms, Programming Design Paradigm, Machine Learning

Anna University

GPA: 3.2

Bachelor of Technology in Artificial Intelligence and Data Science, 2025

Related courses: Reinforcement Learning, Natural Language Processing, Deep Learning Techniques

TECHNICAL KNOWLEDGE

AI/ML:	Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Reinforcement Learning, XGBoost, Scikit-learn, Feature Engineering, Model Optimization, LangChain, LangGraph, RAG
Languages:	Python, SQL, Java, JavaScript, C, HTML, CSS, TypeScript
Frameworks:	Flask, Streamlit, TensorFlow, PyTorch, Spring Boot, Angular
Data Science:	Pandas, NumPy, Matplotlib, Seaborn, Data Preprocessing, Statistical Analysis, SMOTE
Databases:	MySQL, MongoDB, Database Design, JPA/Hibernate (ORM)
Tools:	Git/GitHub, Jupyter Notebook, RESTful APIs, Arduino, Raspberry Pi, IoT Systems
Certifications:	Computer Vision, Data Science, Robotic Process Automation & IoT Foundation - Infosys

PROJECTS

Credit Card Fraud Detection System - Machine Learning Application

Sep 2024 - Dec 2024

- Engineered XGBoost classifier achieving 99.6% accuracy and 88.02% recall on 1.3M+ transactions by developing 31 custom features capturing spending patterns, geographic distance calculations, and temporal anomalies, utilizing SMOTE to address severe class imbalance
- Deployed interactive Streamlit application providing real-time fraud prediction with explainable AI reasoning, risk visualization dashboards, and automated alerts for financial transaction monitoring

Patient Sentiment and Adverse Effect Analysis - NLP Healthcare Application

Nov 2023

- Constructed sentiment analysis application processing 10,000+ patient reviews using Flask, Python, and MongoDB, implementing pie chart visualizations, text-to-speech functionality, and web scraping from drugs.com for comprehensive drug information retrieval
- Applied Natural Language Processing models to classify patient sentiment (positive/negative) with 85% accuracy while automatically summarizing drug descriptions and adverse effects for data-driven healthcare decision-making

Smart Blind Navigation Kit - A.I Powered IoT system

Feb 2020

- Won 1st Prize at National Science Day Expo by redesigning navigation prototype from glove to clip-on wearable format, integrating Arduino Nano, Raspberry Pi, and ultrasonic sensors for real-time obstacle detection with audio alerts for visually impaired users
- Enhanced navigation accuracy and user safety through GPS tracking mobile application delivering real-time location monitoring and route guidance, creating comprehensive assistive device for visually impaired individuals

Employee Management System - Full Stack Data Management Application

Nov 2025

- Architected full-stack CRUD application integrating Spring Boot RESTful API backend with Angular frontend, implementing Spring Data JPA for database operations, custom exception handling, and CORS configuration to manage employee data
- Designed responsive single-page application using Angular, Bootstrap, and RxJS with component-based architecture, dynamic routing, and HTTP client services for seamless real-time employee data management

WORK EXPERIENCE

InterPe, Chennai, India - Software Development Intern

Jul 2022 - Aug 2022

- Strengthened code maintainability and reduced debugging time by implementing systematic code review processes and applying object-oriented programming principles across 5 Java applications through collaborative problem-solving in weekly scrum meetings
- Delivered software solutions within project deadlines by effectively collaborating with 6 member cross-functional development team to implement features, troubleshoot technical issues, and ensure seamless integration

Nuray Chemicals Private Limited, Chennai, India - IT Operations Data Systems Intern

Jul 2023 - Aug 2023

- Achieved automated data logging and storage for pharmaceutical operations by designing, configuring, and deploying environmental monitoring systems establishing LAN connectivity to servers, ensuring continuous tracking of storage conditions
- Ensured accurate real-time quality control data transmission by calibrating analytical instruments and laboratory equipment for chemical analysis, proactively troubleshooting and resolving logging failures

BSNL (Bharat Sanchar Nigam Limited), Chennai, IndiaData Networking Intern

Jul 2024 - Aug 2024

- Diagnosed and resolved 15 network connectivity issues affecting data transmission speeds, improving efficiency by 8% across telecommunication channels
- Analyzed and optimized network infrastructure configurations supporting telecom operations, ensuring system reliability