

Samuel Jeromiah Gnanam

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PROFESSIONAL EXPERIENCE

InterPe, Chennai, India - Software Development Intern Jul 2022 - Aug 2022

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

Nuray Chemicals Private Limited, Chennai, India - IT Operations Intern Jul 2023 - Aug 2023

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

BSNL (Bharat Sanchar Nigam Limited), Chennai, India - Data Networking Intern Jul 2024 - Aug 2024

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

ACADEMIC PROJECTS

ChestAI - Medical Image Classification System Jan 2026

- Developed deep learning system for chest X-ray analysis using Python, PyTorch, and TensorFlow processing 223K+ images implementing supervised learning classification models demonstrating computer vision experience
- Applied analytics building predictive models using CNNs analyzing results implementing data pipeline with preprocessing and feature engineering communicating results through visual dashboards

Credit Card Fraud Detection System - Machine Learning Application Dec 2024

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

Patient Sentiment Analysis - NLP Healthcare Application Nov 2023

- Constructed sentiment analysis processing 10,000+ patient reviews using Flask, Python, and MongoDB implementing visualizations text-to-speech functionality and web scraping for drug information retrieval
- Applied NLP models to classify sentiment with 85% accuracy while summarizing drug descriptions and adverse effects for data-driven healthcare decision-making

Smart Blind Navigation Kit - AI Powered IoT System Feb 2020

- Won 1st Prize at National Science Day Expo redesigning navigation prototype integrating Arduino, Raspberry Pi, and sensors for real-time obstacle detection with audio alerts
- Enhanced navigation accuracy through GPS tracking mobile application delivering real-time location monitoring and route guidance creating assistive device for visually impaired individuals

Employee Management System - Full Stack Application Nov 2023

- Architected full-stack CRUD application integrating Spring Boot backend with Angular frontend implementing database operations exception handling and CORS configuration
- Designed responsive application using Angular, Bootstrap, and RxJS with component architecture dynamic routing and HTTP services for real-time data management

TECHNICAL SKILLS AND COMPETENCIES

AI/ML: Machine Learning, Deep Learning, NLP, Computer Vision, Reinforcement Learning, XGBoost, Scikit-learn, Feature Engineering, LangChain, LangGraph

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

Databases: MySQL, MongoDB, Database Design, JPA/Hibernate

Tools: Git/GitHub, Jupyter Notebook, RESTful APIs, Arduino, Raspberry Pi

Certifications: Computer Vision, Data Science, Robotic Process Automation & IoT Foundation - Infosys

EDUCATION

Northeastern University

GPA: 4.0

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

Related courses: Foundation of AI, Algorithms, Programming Design Paradigm, Machine Learning

Anna University

GPA: 3.2

Bachelor of Technology in Artificial Intelligence and Data Science

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