Allen George Ajith

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EDUCATION

Courant Institute of Mathematical Sciences, New York University

2024 - 2026

MS in Computer Science

New York, NY

Relevant Courses: Deep Learning, Operating Systems

Cochin University of Science and Technology

2019 - 2023

B. Tech. in Computer Science and Engineering - GPA: 9.24/10

Kerala, India

Relevant Courses: Machine Learning, Algorithms & Data Structures, Linear Algebra & Calculus II, Big Data Analysis

SKILLS

Programming & Frameworks: Python, C++, SQL, Solidity, PyTorch, TensorFlow, scikit-learn, Hugging Face Tools & Platforms: NumPy, pandas, Docker, Git, GCP, Azure, FedML, Kubernetes, Flask, FastAPI

EXPERIENCE

Research Assistant

Aug. 2024 – Present

NYU, Courant Institute of Mathematical Sciences

New York, NY

- Working with Dr. Dennis E. Shasha and group to develop a multi-model prediction system for Foreign exchange trading by ensembling Temporal ConvNets, BiLSTM-Attention, NBEATS, and Transformer architectures.
- Building a financial news sentiment analysis system using LLMs with parameter-efficient fine-tuning (PEFT) and knowledge distillation for real-time trading signal generation

AI Intern Jun. 2022 – Dec. 2022

Hitachi Solutions India Pvt. Ltd.

Chennai, India

- Implemented distributed ML systems using FedML, optimizing model convergence through custom aggregation algorithms and differential privacy mechanisms.
- Designed Cross-Silo Federated Learning architectures for cross-organizational ML training, optimizing model performance while maintaining data privacy and locality constraints.

SELECTED PUBLICATIONS

Ajith, A. G., et al., Exploratory Analysis of Link Prediction and Sampling of Social Networks

Jul. 2023

The International Conference on Green Energy, Computing and Intelligent Technology

PROJECTS

Blockchain E-Tender System | Solidity, Circom, Javascript

Dec. 2022 - Mar. 2023

• Architected a decentralized Sealed Bid Tender system on Polygon Network using Zero Knowledge Proof circuits and Solidity smart contracts, featuring automated winner selection and real-time bid tracking UI.

Speech2Emotion | Python, Flask, TensorFlow

Jan. 2022 – Apr. 2022

 \bullet Engineered an end-to-end emotion classification system with custom CNN architecture and MFCC feature extraction, achieving 11% accuracy improvement over VGG-16 baseline.

LEADERSHIP AND VOLUNTEERING

Google Developer Students Club, CUSAT | Team Lead

May 2021 – Jul. 2022

- Guided a community of 200+ students, organizing weekly technical workshops, hackathons, and mentorship programs in web development, ML, and cloud computing.
- Established project-based learning tracks, peer programming initiatives, and industry connect events, resulting in 30% increase in student participation.

CERTIFICATIONS

Google Cloud Skills: Data Engineering, DevOps, Machine Learning

Toastmaster's International: Competent Communicator, Competent Leader