Anirudh Arunkumar

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EDUCATION

Georgia Institute of Technology — Expected May 2025
Degree: B.S. in Computer Science (Artificial Intelligence & Information Internetworks) — *Atlanta, GA*
Courses: Data Structures & Algorithms, Machine Learning, Natural Language, Computer Vision, Statistics
Combinatorics, Information Security, Computer Networking, Cloud Computing, Multivariable Calculus

TECHNICAL SKILLS

Languages: Python, Java, Go, TypeScript, JavaScript, C++, Swift, Kotlin, HTML, CSS, MIPS Assembly
Developer Tools: React, Redux, Gradle, Flask, Postman, Spark, Docker, Node.js, Webpack
Certifications: Nvidia Generative AI Development, Design and Analysis of Algorithms, AWS Cloud

EXPERIENCE

Georgia Institute of Technology — January 2025 – Present
Undergraduate Teaching Assistant — *Atlanta, GA*
- Guided 612 students in mastering Python by holding help-desk sessions and evaluating programming assignments.
- Automated syncing of 12,000+ grades between platforms, streamlining performance tracking using Python.

Truist Financial Corporation — June 2024 – December 2024
Software Engineer Co-Op — *Atlanta, GA*
- Developed Flask RESTful APIs serving 200,000+ users, enhancing account management and billing workflows.
- Architected and deployed a machine learning pipeline using AWS SageMaker, fine-tuned BERT LLM, and TensorFlow for processing 20,000+ HR documents, eliminating manual reporting by 100%.
- Accelerated developer release velocity 1.5x by refactoring AWS Secrets Manager implementation across all APIs.
- Engineered a React dashboard via TypeScript for HPC analysis, improving reliability and scalability insights.

AI-based Discovery and Innovation Lab — August 2023 – December 2024
Machine Learning Researcher — *Atlanta, GA*
- Created XGBoost, MLP, and ResNet50 classifiers using Pytorch for lung disease diagnosis from medical data, achieving 98% accuracy and 97% F1 score with multi-modal inputs (images and tabular).
- Leveraged D3.js to visualize 7,000 light waves and RGB channels on interactive 3D surfaces and graphs.
- Optimized a Generative Adversarial Deep Learning Network for optical nano-device design with 92% accuracy.

Truist Financial Corporation — Jun 2023 – Aug 2023
Software Engineer Intern — *Atlanta, GA*
- Improved ACH and Wire transfer application, a critical system that handles 2M+ transactions worth 200 billion dollars every day by redesigning API request handling in Java Spring Boot, reducing processing time by 15%.
- Resolved bugs by debugging legacy code using JUnit tests and Postman, increasing code coverage by 200+ cases.
- Performed MySQL query optimizations and materialized tables, improving database response time by 90%.

LightStream — June 2022 – August 2022
Software Engineer Intern — *Atlanta, GA*
- Enhanced microservices speed via gRPC implementation, triggering a performance boost of over 50%.
- Streamlined developer workflow in a cloud infrastructure team through GitHub Actions and 3 new Go packages.

Kaelorien Data — May 2020 – August 2021
Founder, Chief Technology Officer — *Remote*
- Constructed a C# desktop application using .NET and a Cassandra database for tech product prices.
- Generated business insights through low-level parallel processing and multithreading data ingestion.

PROJECTS

CineMatch | *Swift, Kotlin, Python, NumPy, Pandas, Sci-kit, Django, SwiftUI* — October 2024
- Built an AI-powered front-end app using a Django back-end capable of handling 3,000 users.
- Trained and deployed machine learning recommendation algorithms on a dataset of over 1M+ movie ratings.

Coinhood | *TypeScript, Python, React.js, Redux, TailwindCSS, Robinhood* — August 2024
- Automated a cryptocurrency trading strategy by using real-time market data from Robinhood Crypto API.
- Ensured robust error handling and rate-limiting to ensure 99.97% site-reliability and continuous operation.