Anirudh Arunkumar

(678) 267-6802 | aarunkumar8@gatech.edu | linkedin.com/in/anirudh-arunkumar | US Citizen

EDUCATION

Georgia Institute of Technology   Atlanta, GA
B.S. in Computer Science   *Expected May 2025*

EXPERIENCE

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

Truist Financial Corporation   Atlanta, GA
Software Engineering Co-Op   *Jun 2024 – Dec 2024*
- 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 Innovation and Discovery Lab – Georgia Institute of Technology   Atlanta, GA
Machine Learning Researcher   *Aug 2023 – Dec 2024*
- 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   Atlanta, GA
Software Engineering Intern   *Jun 2023 – Aug 2023*
- Improved ACH and Wire transfer application, a critical system that handles 2M+ transactions worth 166 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   Atlanta, GA
Software Engineering Intern   *Jun 2022 – Aug 2022*
- Enhanced microservices speed via gRPC implementation, triggering a performance boost of over 50%.
- Streamlined developer workflow in an Agile team through Github Actions, Confluence, and 3 new Go packages.

Kaelorien Data   Remote
Founder, Chief Technology Officer   *May 2020 – Aug 2021*
- Forecasted tech product price volatility through probabilistic and regressive models with 90% accuracy.
- Constructed a C# desktop application using .NET and an Apache Cassandra database for scalable data storage.
- Ingested data faster than 2x industry standard through low-level parallel processing and multithreading.

PROJECTS

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

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

TECHNICAL SKILLS

Languages:	Python, Java, C++20, Go, TypeScript, JavaScript, Kotlin, Swift, HTML, CSS, Bash
Frameworks:	Flask, Django, React, Next.js, Express.js, Node.js, Spring Boot, Gin, SwiftUI, TailWindCSS
Developer Tools:	Docker, Kafka, Grafana, Spark, Linux, Prometheus, Git, AWS, Microsoft Azure, CI/CD
Coursework:	Natural Language Processing, Algorithms, Computer Vision, Machine Learning, Data Structures