Hunter Liang

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https://github.com/fractaloffugue | https://hunsliang.com/

EDUCATION

Virginia Tech Blacksburg, VA

Bachelor of Science in Computer Science GPA: 3.8/4.0 2021 - 2024

Master of Engineering in Computer Science GPA: 3.9/4.0 2024 - 2025

Coursework: Deep Learning, Machine Learning, Info. Visualization, AI in Software Delivery, Social Media Analytics

CFA Institute Level 1 Candidate 2026

EXPERIENCE

Founding Software Engineer — 2025 - Jan 2026

Anode News | Cryptocurrency Intelligence Platform — Blacksburg, VA

- Built an end-to-end personalized crypto news aggregation engine using Go, PostgreSQL, Redis, and Next.js that prioritizes relevant content based on user watchlists, tagging key sentiment shifts and market trends through RESTful APIs and WebSocket connections.
- Implemented advanced topic modeling algorithms (LDA, BERTopic) with Python, scikit-learn, and Hugging Face Transformers, to extract underlying themes from crypto news sources, enabling users to discover hidden market narratives and interconnected industry developments.
- Developed predictive time-series forecasting using frameworks like NeuralProphet that track sentiment momentum patterns and their price trajectories, achieving 78% directional accuracy on select tokens.

DevOps Software Engineer Co-op — 2023

Peraton — Blacksburg, VA

- Prototyped microservice deployment pipeline (Docker, AWS EKS, Terraform), which reduced deployment time by ~65% and improved system scalability and was eventually adopted by several teams.
- Integrated Big Bang 2.0 Helm chart for deploying DoD-hardened packages into a Kubernetes cluster, and streamlined pre-deployment compliance checklist with NIST 800-171 security standard.
- Simulated disaster recovery for the Kubernetes cluster, reduced recovery timeframe by 4 hours and remediated 95% of critical security vulnerabilities within 48-hour SLA in canary.

Undergraduate Research Assistant — 2021 - 2023

Visionarium @ Advanced Research Computing, Virginia Tech — Blacksburg, VA

- Implemented new techniques and interactive CLI for scientific visualizations with HTML5/X3D in ParaView and Castle Game Engine with Python – improved rendering performance by ~40% and reduced load times for complex 3D medical datasets. My work was critical to our lab winning a grant from the RAMP accelerator.
- Submitted "Enhancing Brain Flow Visualization with Automated 3D Data Processing: A Study on DCE-MRI Data from Mice with Tumors" paper to the ACM Web3D conference.
- Won 2023 VTURCS 3rd Place Research & 3rd Place Industry Awards within the Department of Computer Science at Virginia Tech annual research symposium.

Undergraduate Research Assistant — 2024

Sanghani Center for AI & Data Analytics, Virginia Tech — Blacksburg, VA

- Developed metadata-augmented RAG system for financial document question-answering, processing SEC 10-K/10-Q filings using ChromaDB vector database and OpenAI embeddings with Azure deployment.
- Engineered document preprocessing pipeline with tiktoken-based chunking and metadata extraction, enabling filtered retrieval by company name and fiscal year through ChromaDB's persistent storage.

Undergraduate Teaching Assistant — 2021 - 2024

Department of Computer Science, Virginia Tech — Blacksburg, VA

- Hosted weekly labs, lectures and office hours for several courses including Python II (CS1064, CS2064), Computer Organization I (CS2114), Java I and II (CS2114).

TECHNICAL SKILLS

Languages: Go, Python, Java, Javascript, TypeScript, C/C++, HTML/CSS, SQL

Tools/Technologies: Git, PostgreSQL, MongoDB, AWS (EKS, IAM, RDS), Docker, Kubernetes, Typesense, Redis, Terraform, Keras, Stripe, GitLab CI/CD, Huggingface, PyTorch, Scikit-Learn, ChromaDB, Supabase, Node.js