

Austin Chen

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EDUCATION

Georgia Institute of Technology

Bachelor of Science in Computer Science, Minor in Mathematics

Atlanta, GA

Expected Dec. 2027

- **Concentrations:** Artificial Intelligence, Networking & Systems
- **Coursework:** Data Structures & Algorithms, Computer Systems & Networks, Database Systems, Machine Learning, Artificial Intelligence, Object-Oriented Programming, Computer Architecture, Design & Analysis of Algorithms

EXPERIENCE

AT&T

Jun. 2026 – Aug. 2026

Software Engineer Intern, Technology Development Program

Atlanta, GA

- Eliminated live-system dependency for Softphone unit tests by mapping **13** service resources to **19** downstream operations, then building a **Java** mock harness of **38** evidence-classified fixtures driving **19** scenario-test classes across **55** modeled scenarios
- Surfaced a **\$380M** annual retention opportunity across **5,800** stores by prototyping an agentic AI workflow that flags anomalous accounts via **z-score** detection and ranks explainable talking points per shift

Geotab

Jan. 2026 – May 2026

Software Engineer Intern

Atlanta, GA

- Reduced manual workflow time by **30%** by building and deploying AI automation pipelines in **Python**, designing reusable prompt templates and evaluation frameworks adopted across **3** team projects
- Cut average case resolution time by **25%** by analyzing patterns across **500+** support cases and surfacing **10+** viable automation candidates

MATRIX Lab

Aug. 2024 – Dec. 2025

Lab Automation Software Engineer

Atlanta, GA

- Increased lab throughput by **15%** by architecting a **Python IoT** monitoring service that raised equipment utilization tracking by **83%**, enabling predictive maintenance
- Cut researcher onboarding time by **50%** by building a centralized knowledge base documenting **10+** **REST API** integrations

SIPLab

Apr. 2025 – Aug. 2025

Software Engineer Intern

Atlanta, GA

- Reduced experimental iteration time by **40%** by building a reproducible **Python** data pipeline (**NumPy**, **Snakemake**) that automated ingestion for **3** researchers
- Improved signal classification accuracy by **18%** by building a **PyTorch** training and evaluation pipeline over **10K+** experimental speech samples

PROJECTS

AI Prototyping Instructor – RAG Assistant | *Next.js, Python, Pinecone, Azure OAuth, Vercel*

- Achieved **94%** retrieval accuracy by iteratively refining the knowledge base from query-log analysis across successive evaluation rounds
- Held out-of-scope deferral above **80%** by gating retrieval confidence in a serverless **Next.js** backend orchestrating **Pinecone** vector search behind **Azure OAuth**

Cross-Exchange Crypto Trading Engine | *Python, TimescaleDB, AWS S3, Parquet*

- Unified live order books, depth, and funding rates from **5** exchanges behind one interface, surfacing price-impact and arbitrage signals for a given trade size
- Tracked real-time positions and unrealized PnL across **5** venues through a latency-instrumented order interface, persisting captures to **TimescaleDB** and partitioned **Parquet** on **AWS S3** for backtesting

Real-Time Safety Monitoring System | *Python, OpenCV, PyTorch, Raspberry Pi*

- Achieved **84% mAP** on real-time PPE detection by fine-tuning **YOLOv8n** for constrained inference on **Raspberry Pi** edge devices
- Reduced incident response time by **60%** by implementing an automated alerting pipeline that notifies lab staff of safety violations as they occur

Makerspace Dashboard | *Next.js, TypeScript, React, Tailwind CSS*

- Cut widget load times by **34%** across **5+** views by applying **server-side rendering** and **ISR** to async data fetching, now running in production for a Georgia Tech lab
- Surfaced real-time telemetry for **20+** machines by integrating the 3DPrinterOS and SUMS APIs into a single operations view

Vyta – Social Fitness Platform | *Django, Python, SQLite, JavaScript*

- Reduced average query latency by **37%** by introducing indexed relational models and **Django** signals across activity-tracking write paths
- Generated personalized workouts for **50+** users by architecting a modular **Django** platform of **5** integrated services backed by the **Gemini API**

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL, C++, C, C#, HTML/CSS

Frameworks & Libraries: React, Next.js, Node.js, Django, FastAPI, Angular, Tailwind CSS, pytest, JUnit, Pandas, NumPy, Snakemake

Developer Tools & Platforms: Git, Maven, Docker, Kubernetes, AWS, Azure, Vercel, Linux, CI/CD, GitHub Actions, REST APIs, WebSockets, PostgreSQL, TimescaleDB, MySQL, MongoDB, Raspberry Pi

AI/ML: PyTorch, TensorFlow, scikit-learn, OpenCV, YOLO, Pinecone, LangChain, RAG, LLM prompt engineering, anomaly detection