

Andrew Chang

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EDUCATION

Emory University

B.S. in Computer Science | GPA: 3.5/4.0

Atlanta, GA

Aug 2022 - May 2026

- Relevant Coursework: Data Structures & Algorithms, Database Systems, Systems Programming, Analysis of Algorithms, Computer Architecture, Machine Learning, Artificial Intelligence, Data Mining, Quantum Computing, Linear Algebra
- Activities: Competitive programming, Technical Advisor (Atlas Consulting Group), Club Volleyball President, Chess Club

EXPERIENCE

Bank of America

Software Engineer

Jersey City, NJ

Jul 2026 - Present

- Developing a Java market-risk application, shipping monthly releases for Value-at-Risk and related risk assessments
- Sustaining Python downstream API that serves risk managers for management and mitigation of market risk
- Removed outdated Ehcache usage to unblock Java upgrade; coded unit tests and ran Linux performance validation

Software Engineer Intern

Jun 2025 - Aug 2025

- Built a timeseries ticker dependency dashboard querying Sandra DB to support Value-at-Risk backtesting visualization
- Designed and prototyped migration of 7B+ records to Apache Iceberg for horizontal scaling on Spark/Hadoop
- Deployed a Python charting library and internal web portal for standardized financial visualizations

SAI (AI Edtech Startup)

Software Engineer Intern

New York, NY

Jun 2024 - Aug 2024

- Developed an AI-integrated course support platform used by 20,000+ students and 20 professors
- Shipped study webapp features from Figma mockups using TypeScript, HTML, and CSS
- Spearheaded WCAG 2.1 AA accessibility compliance, including responsive layout, keyboard navigation, and zoom support

Casing Machine (Consulting Interview-Prep Startup)

Developer

Atlanta, GA

Jan 2024 - May 2024

- Launched a case interview prep platform with 10K+ users using Pug, CSS, Firebase, and JavaScript
- Improved GPT prompt templates for complex mock interviews and implemented interview UI and voice-to-text transcription

PROJECTS

Brackt | Next.js, React, TypeScript, Supabase, PostgreSQL, Drizzle, Expo

Apr 2026 - Present

- Built a full-stack collegiate volleyball tournament platform across a 36-table PostgreSQL schema with 60 SQL migrations
- Developed tournament engine with university-aware pools, multi-tier brackets, court auto-scheduling, ref crews, and tiebreaks
- Hardened multi-tenant RLS with co-host/staff roles; shipped Realtime live scores, kiosk QR scoreboards, and packet PDFs
- Implemented a versioned REST API (~90 routes) and Expo mobile client with shared typed contracts
- Zod-validated Server Actions and unit tests covering bracket generation, seeding, and standings

Refusal Signal Extraction | Python, Ollama, SentenceTransformers, pandas

Sep 2025 - Present

- Programmed an installable Python research package and CLI measuring how LLM refusals leak hidden system policies
- Designed 5 benign probing strategies with dual metrics (verbatim keyword disclosure and MiniLM semantic similarity); hypothetical and moral framing caused all verbatim leaks and every category showed paraphrase leakage
- Demonstrated system-prompt-blind second model reconstructed the intent of 3 planted safety rules from refusal signals alone
- Implemented offline replay, regression tests, and CI to freeze published metrics

NBA Player Performance Prediction | Python, scikit-learn, pandas

Feb 2024 - May 2024

- Co-authored a paper predicting NBA player point totals from 1997-2023 box score data across neural and tree-based models
- Built and trained an MLP regressor (R-squared of 0.651) with hyperparameter tuning and feature selection
- Benchmarked against Random Forest, linear/ridge regression, and KNN baselines
- Engineered features from rolling scoring averages and opponent defensive trends, validated against market lines

AWARDS

- ICPC Southeast USA Regional Contest 2nd Place (2023)
- HackATL 3rd Place (2024)

TECHNICAL SKILLS

Languages: Python, Java, JavaScript/TypeScript, C/C++, Scala, SQL

Frameworks: React, Next.js, Node.js, Django, Flask, scikit-learn, pandas, NumPy

Tools: AWS (EC2, RDS, VPC), PostgreSQL, MySQL, Git, Linux, Apache Spark, Hadoop, Iceberg, Drizzle, Cursor, Claude