ALLEN JIANG

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Education

Georgia Institute of Technology — May 2026
Bachelor of Science in Computer Science — *Atlanta, GA*
GPA: 3.7

Relevant Coursework

- **Machine Learning & AI**: Machine Learning, Intro to AI, Robotics and Perception
- **Systems & Networking**: Computer Networking, Databases, Android Development
- **Core Concepts**: Algorithms, Data Structures, Automata and Complexity

Experience

Planetway — **June 2025 – Present**
Software Engineer @ Planetway — *Remote*

- Developed a responsive frontend using Next.js, TypeScript, and Tailwind CSS deployed on Vercel, enabling the interactive visualization of over 8,000 monthly data points.
- Engineered a scalable Supabase backend, implementing Row Level Security and optimizing SQL queries to ensure sub-second data retrieval latency.
- Currently refactoring Supabase SQL queries to reduce database latency, directly accelerating the rendering speed of data visualizations for end-users.

Agile Communications Architecture — **January 2025 – Present**
Researcher @ GaTech — *Atlanta, GA*

- Developed an AI-powered image compression system using PyTorch and Stable Diffusion that reduces data transmission size by 90%, enabling faster transfer speeds while maintaining 95% visual accuracy (validated by OpenAI's CLIP.)
- Currently building a resilient radio transmission system that uses machine learning to automatically correct errors and ensure clear data delivery in environments with high signal interference.

Projects

Flight Connection Risk Predictor | *Python, XGBoost, Pandas, scikit-learn* — **November 2025**

- Developed a machine learning model analyzing 15M+ flight records to predict the probability of a missed connection, minimizing passenger disruption and reducing airline re-routing costs.
- The predictive model had an overall accuracy of 90%, and identified route congestion and scheduled timing as key delay predictors, enabling proactive scheduling and rerouting decisions.

CarbonTracker | *Javascript, React, Vercel, Supabase* — **June 2025**

- Collaborating with Planetway to build a carbon footprint tracking platform for companies, with secure authentication, notification, and cloud backend, improving accuracy and efficiency in sustainability reporting.
- Developed the frontend using Vercel and integrated Supabase for scalable backend infrastructure, enabling secure data processing and storage.

Wrappedify App | *Java, Kotlin* — **April 2024**

- Developed an Android app leveraging the Spotify API to generate on-demand, personalized Spotify summaries, offering users an engaging music data experience.
- Integrated Firebase for secure user data storage, account setup, and a shareable summary feature, enabling users to post their summaries on a social media-style feed, fostering community engagement.

Number Recognition Software | *Python* — **July 2024**

- Engineered a neural network with TensorFlow and Keras, achieving a 95% recognition accuracy for handwritten numbers, significantly advancing the model's reliability.

Leadership / Extracurricular

Auburn Hacks 2023 — **February 2023**
Team Leader @ Tropi RPG — *Auburn, AL*

- Lead a team in designing and building a game with a custom game engine from scratch in Python, focusing on foundational mechanics and functionality.
- Directed an AI driven movement pattern for background NPCs, serving as dynamic elements to enrich the game's environment.

Technical Skills

Languages: C++, Assembly, C, Python, Java, Javascript, SQL, SQLite, NoSQL
Technologies/Frameworks: React, PyTorch, TensorFlow, Pandas, scikit-learn, XGBoost, NumPy, Transformers
Developer Tools: Git, GNURadio, Vercel, Supabase, Unity, Jupyter Notebook, Android Studio