Carter Tierney

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EDUCATION

Georgia State University, *B.S. / M.S. in CS with Privacy/Security* GPA 3.76 Expected Spring 27

Honors/Leadership: President of Barbell Club, Hackathon Winner, Graduate Assistantship (Top 15% of applicants)

Relevant Courses: Sof Dev/Eng, ML, Algorithms/Data Structures, Database Systems, Data Science, Web/Mobile Dev

EXPERIENCE

Software Developer *Paulk Clinic* https://www.thepaulkclinic.com/ **Aug 2025 - Present**

- Led healthcare website modernization using PHP/CSS, achieving **25%** surge in patient engagement and **25%** reduction in bounce rate.
- Redesigned site infrastructure with optimized WordPress plugins, boosting performance by **60%** and cutting page load time from **4.2s to 1.7s**.
- Implementing an ethically compliant GenAI chatbot using PHP/APIs to raise patient engagement/reduce bounce rate.

Co-Founder *UrSim* Github Link **Oct 2025 - Present**

- Engineered fantasy sports lineup generator with multi-variable optimization and real-time data APIs, delivering accurate DraftKings/FanDuel DFS lineups with quant optimization.
- Collaborating with content creators and implementing marketing strategies to enhance user engagement growth.
- Deploying B2B SaaS desktop/web applications with monthly subscription pricing model to drive recurring revenue.

Software Engineer Intern *Alpha Web Advisors* **Oct 2024 - Aug 2025**

- Migrated **500+** property listings (20K+ records) to PostgreSQL with a normalized schema/35+ validation rules, ensuring **zero data loss.**
- Built AI automation tools with Python workflows, boosting data accuracy from **92% to 99.8%** and cutting query time **18x** (3.2s → 180ms), saving **15+** hours weekly on HOA reports.
- Delivered Power BI dashboards in **Agile** sprints, replacing Excel workflows and improving client efficiency/satisfaction.

Manager/Bartending Lead *Bartaco/Jon Taffer's Tavern* **Sep 2020 - Present**

- Ranked **#1** bartender across 30+ locations (350 employees) by increasing premium sales through targeted promotions.

TECHNICAL SKILLS

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

Frameworks: ReactJS, NodeJS, ExpressJS, VueJS, Django, Spring Boot, FastAPI, Next.js, Tailwind CSS, Bootstrap

Tools & Infrastructure: Agile/Scrum, Git, Docker, Kubernetes, CI/CD, AWS, Linux/Unix, REST APIs

Data & ML: GenAI, PostgreSQL, PyTorch, Pandas, NumPy, ETL pipelines, Big Data, Power BI, Tableau

PROJECTS

Winner Emory Hacks: VoiceVitals | *TypeScript/React, ML/DL, Firebase* **|** Devpost Link **Nov 2025**

- Built FastAPI + PyTorch ML pipelines that analyze voice recordings, achieving **~65%** accuracy in detecting early dementia indicators.
- Engineered doctor/patient dashboards (React + Firebase) with secure audio streaming for clinical trial/data collection.
- Recognized as a hackathon-winning project for innovating voice-based health monitoring and telehealth for cognitive disabilities.

E-commerce Analytics Platform | *NumPy, Pandas, Apache Spark/Kafka, ML, Big Data***|** Github Link **Oct 2025**

- Developed a containerized analytics platform processing large-scale ecommerce datasets similar to Amazon using big data technologies, implementing clustering algorithms for customer segmentation.
- Engineered data science pipelines with machine learning models, tracking user behavior via cookies, and delivering actionable insights.
- Optimized fraud detection analytics using numpy, pandas, and scikit-Learn to achieve a **95%+** accuracy rating and a **<2%** false positive rate.