

# Carter Tierney

U.S. Citizen • (404)807-0557 • <https://www.linkedin.com/in/carter-tierney/> • <https://github.com/ctsc/>

## EDUCATION

---

**Georgia State University, B.S. / M.S. in Computer Science**

GPA 3.76 Expected Spring 27

**Honors/Leadership:** President of Barbell Club, Competitive 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/>

August 2025 - Present

- Collaborating directly with the owner to lead healthcare platform modernization using **PHP/CSS** to create a responsive design, already achieving **25%** surge in patient engagement and **25%** reduction in bounce rate.
- Redesigned site infrastructure and leveraged optimized WordPress plugins with codebase to enhance SEO, analytics, and load efficiency—boosting performance by **60%** and cutting page load time from **4.2s to 1.7s**.

**Co-Founder** *UrSim* <https://github.com/shawtes/mlb-draftkings-system>

October 2025 - Present

- Engineering a scalable web app with AWS and real-time data APIs, integrating projections with the optimizer to deliver accurate, dynamic fantasy sports lineups with quant optimization.
- Collaborating with content creators and implementing marketing strategies to improve user experience, engagement, and platform growth.

**Software Engineer Intern** *Alpha Web Advisors*

October 2024 - Aug 2025

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

**Manager/Bartending Lead** *Bartaco/Restaurant Industry*

September 2020 - Present

- Ranked **#1** bartender across 30+ locations (350 employees) by increasing premium sales through targeted promotions, winning the company-wide sales contest.
- Advanced to the youngest manager/bartender at **two 10+** year establishments, leading 10-person teams, overseeing cash reconciliation, and driving a **30%** sales increase within 4 months.

## TECHNICAL SKILLS

---

**Languages:** Python, JavaScript/TypeScript, Java, SQL, PHP, HTML/CSS, Bash/Shell

**Frameworks:** React, Node.js, Express.js, Flask, Django, Spring Boot, FastAPI, Next.js, Tailwind CSS, Bootstrap

**Tools & Infrastructure:** Agile/Scrum, Git, Docker, CI/CD, AWS, Kafka, Apache Spark, Linux/Unix, REST APIs, MongoDB

**Data & ML:** PostgreSQL, PyTorch, Pandas, NumPy, Scikit-learn, TensorFlow, ETL pipelines, data warehousing, distributed systems, query optimization, Power BI, Tableau

## PROJECTS

---

**Winner Emory Hacks: VoiceVitals | TypeScript/React, ML/DL, Firebase |** <https://devpost.com/software/voicevitals> Nov 2025

- Built FastAPI + PyTorch ML pipelines that analyze voice recordings for clarity, prosody, and respiratory strain, achieving **~65%** accuracy in detecting early dementia indicators.
- Engineered doctor/patient dashboards (React + Firebase) with secure audio streaming to pursue research funding for further data collection within **clinical trials**.
- Recognized as a hackathon-winning project for innovating voice-based health monitoring, and envisioning the real-world impact of the **future of telehealth** for cognitive disabilities.