

Gerardo Rivera

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EDUCATION

Georgia State University

Atlanta, GA

B.S. in Computer Science, GPA: 4.12

May 2026

Relevant Coursework:

Data Structures, Operating Systems, System Level Programming, Advanced Algorithms
Computer Architecture, Cloud Computing, Software Development, Software Engineering

Certifications:

Microsoft Certified: Azure AI Fundamentals (Expected June 2026)

TECHNICAL SKILLS

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

Frameworks: React, Next.js, Vue.js, Django, TailwindCSS, Node.js, FastAPI

Developer Tools: AWS, Windows, Linux/Unix, Git, Google Cloud Platform, dBeaver, Docker

Libraries: Pandas, NumPy, Matplotlib

WORK EXPERIENCE

Software Tester Engineer - Applause

May 2025 – Present

- Increased application stability by 15% before production by executing exploratory tests and documenting over 50+ high-quality bugs with reproduction logs.
- Accelerated the debugging process by 25% through documenting high-quality bug reports with reproduction steps and system logs using industry-standard tools.
- Reduced production hotfixes by 15% collaborating with global development teams in an agile environment to verify bug fixes before release.
- Maintained 99% core system uptime by analyzing technical requirements and performing regression testing to ensure new deployments does not impact existing features.

PROJECTS

StreetSense | *TypeScript, JavaScript, Python, CSS/HTML, Google Gemini API*

- Revamped UI performance by 25% and reduced data entry errors by 45% through designing a React-based interface that allows users to log road hazards, such as potholes, on an interactive, community-driven app.
- Reduced data loss incidents by 15% by integrating a SQL database and leveraging the Gemini API to automate AI severity scoring and vehicle damage estimation for suspension and tires.
- Achieved 100% on-time delivery of a functional platform by collaborating in a team of four to develop a gamified leaderboard and an Admin Dashboard for officials to send critical road repairs.
- Improved user search efficiency by 20% implementing specific features such as CRUD functionality and processed record search parameters within a live, community-driven environment.

Research-RAG | *React, Node.js, MongoDB Atlas, Google Gemini API*

- Engineered an AI research assistant using MongoDB Atlas to perform hybrid retrieval, fusing Vector Search and BM25 full-text search via Reciprocal Rank Fusion in a single pipeline.
- Established retrieval precision by implementing Google Gemini API with asymmetric task types and Matryoshka dimensionality truncation, reducing storage needs by 75%.
- Enhanced data accuracy by developing a section-aware PDF chunking algorithm to maintain semantic boundaries and a system prompt that enforces strict inline citation anchoring.

LEADERSHIP & INVOLVEMENT

GSU Programming Club / Peer Technical Lead: Strengthened team technical output by conducting peer code reviews and leading hands-on workshops in Python and React, which streamlined development workflows for 30+ club projects.

GSU Cybersecurity Club / Active Member: Attended workshops and events focused on cybersecurity fundamentals and career guidance.

Sprout@GT 2026: Awarded for Best Use of MongoDB Atlas by building a high-performance RAG system within a 24-hour sprint.

Hacklanta 2026: Deliver a full-stack mobile application prototype within a 12-hour intensive development sprint.

GSU Technology Immersion Challenge sponsored by Truist: Secured a top-10 finish at a team cybersecurity competition by solving problems in encryption, web exploitation, and reverse engineering.