

# Isaac Chacko

[isaacchacko.co](http://isaacchacko.co) | [isaac.chacko05@gmail.com](mailto:isaac.chacko05@gmail.com) | [linkedin.com/in/isaacchacko](https://linkedin.com/in/isaacchacko) | [github.com/isaaccchacko](https://github.com/isaaccchacko)

## EDUCATION

<b>Texas A&amp;M University, Engineering Honors</b> <i>B.S. Computer Science, Applied Mathematics.</i>	College Station, TX May 2027
<ul style="list-style-type: none"><li>• Relevant Coursework: Data Structures &amp; Algorithms, Computer Organization, Real Analysis.</li><li>• Awards: National Merit Winner, Texas A&amp;M President's Endowed Scholar, Dean's Honor Roll.</li></ul>	

## EXPERIENCE

<b>Logistics Director</b> <i>TIDAL</i>	October 2025 – Present College Station, TX
<ul style="list-style-type: none"><li>• Ran one of the largest hackathons in Texas A&amp;M by organizing sponsorship/venue procurement for <b>300+</b> hackers.</li><li>• Developed TIDAL Hack 2025 website to handle real-time updates by optimizing media for concurrent viewership.</li><li>• Led various hackathon workshops from our sponsors and directed mentors/judges with instruction when necessary.</li></ul>	
<b>Undergraduate TA</b> <i>Texas A&amp;M Department of Computer Science</i>	August 2025 – Present College Station, TX
<ul style="list-style-type: none"><li>• Developed critical plagiarism software as a part of the plagiarism subteam to verify <b>600+</b> student submissions using C++ fingerprinting algorithms and AI detection software.</li><li>• Mentored fall cohort through "Intro to C++", within weekly lab sessions/office hours, and clarified student misunderstandings between C++98, C++11, C++17 version differences, Makefiles, and stack traces via GDB.</li></ul>	
<b>Backend Engineer</b> <i>SISO Engineering</i>	May 2025 – August 2025 Houston, TX
<ul style="list-style-type: none"><li>• Engineered query optimizations to cut <b>300m+</b> row query run times by <b>73%</b> and improved real-time streaming scalability across <b>40+</b> international edge devices.</li><li>• Blew the whistle and saved <b>1.7 million records</b> of streaming data via preventative data validation measures.</li><li>• Created infrastructure-as-code with Terraform to allow for rapid deployment/provisioning of Grafana workspaces and Azure database resources to standardize operations for present and future customers.</li></ul>	

## PROJECTS

<b>HackerStats</b>   <i>Neo4j, Selenium, AWS EC2, NextJS</i>	August 2025
<ul style="list-style-type: none"><li>• Provisioned AWC EC2 resources to host multithreaded Selenium instances across a shared queue to engage in recursive BFS search of global hackathon submissions via Devpost.</li><li>• Devised an automated job that utilizes natural language models and topic analysis to vectorize newly ingested hackathon submissions by their text description.</li><li>• Achieved real-time retrieval by precomputing and efficiently storing high-dimensional devpost vectors, leading to <b>sub-100ms</b> similarity searches.</li></ul>	
<b>Eulerelo</b>   <i>TypeScript, Tailwind CSS, Prisma, PostgreSQL, Railway</i>	March 2025
<ul style="list-style-type: none"><li>• Developing a full-stack web app enabling real-time math duels between users, powered by a custom TypeScript socket server, a Prisma-hosted PostgreSQL database, and a Railway deployment for CI/CD within a mono-repository.</li><li>• Sole designer of backend infrastructure: utilized singleton patterns, socket connections, and mutex locks to ensure robust matchmaking, instant solution evaluation, and high-concurrency performance.</li></ul>	

<b>Presentation Coach</b>   <i>Python, React, NextJS</i>	September 2024
<ul style="list-style-type: none"><li>• Won HowdyHack 2024 by building a analytics tool to track and visualize real-time audience retention, empowering presenters with actionable feedback on engagement.</li><li>• Leveraged machine vision and speech vectorization to analyze the slide deck and speaker delivery, surfacing key insights under time constraints.</li></ul>	

## TECHNICAL SKILLS

**Languages:** TypeScript, JavaScript, Python, C++, KQL, SQL, Java, HTML, CSS, Clojure, ClojureScript, Lua  
**Technologies:** Linux, Git, ADX, Azure DevOps, Prisma, Redis, NextJS, Grafana, PowerBI, Godot, Vercel, Django  
**Emphasis:** Databases, Backend Web Development, Data Analysis, Game Design/Development