

Mihir Balsara

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EDUCATION

Georgia Institute of Technology

Bachelor's of Science in Computer Science - GPA: 3.76

Atlanta, GA

Expected May 2026

Relevant Coursework

Data Structures & Algorithms, Design & Analysis of Algorithms, Object-Oriented Programming, Computer Organization, Linear Algebra, Discrete Mathematics

EXPERIENCE

Cybersecurity Research Intern | C, Java, Jenkins, Nginx, Python, docker, Git

May 2024 – Present

Georgia Tech Research Institute

Atlanta, GA

- Competing in the DARPA AI Cyber Challenge (AIXCC) with Team Atlanta (SSLab, GTRI, KAIST Hacking Lab, Samsung Research Korea, etc.) under Professor Taesoo Kim
- Qualified for AIXCC Finals at DEFCON 32
- Developed C-based initial corpus generator and mutators to semantically adapt current Cyber Reasoning System to application-specific infrastructure

Software Developer Intern | WordPress, PHP, SQL, CMS

Apr. 2023 – May 2023

RK Centers

Burlington, MA

- Built a secure login and user-friendly property selection portal using WordPress and PHP
- Optimized MySQL database structure to ensure seamless integration with the new site framework
- Increased client-server interaction efficiency by 20% resulting in faster loading times and improved user experience

Research Assistant | Python, pandas, Matplotlib, Seaborn, SciPy

Aug. 2021 – Jul. 2022

Lincoln Labs

Lexington, MA

- Conducted research on the impact of online vs. offline education on student performance in mathematics
- Utilized data visualization tools to create compelling visuals that highlighted the differences in students' math performance reports
- Published research findings in peer-reviewed Boston College journal

Data Engineer | Python, pandas, Matplotlib

Jun. 2021 - Aug. 2021

Russian School of Mathematics

Lexington, MA

- Mined student score and report data from RSM's database to identify trends in student performance
- Developed an efficient algorithm to process and analyze 2 million student data points
- Leveraged pandas library to clean and prepare 2 million student data points for analysis

PROJECTS

Spotify Wrapped | Android Studio, Java, Gradle, Firebase, GitHub

Feb. 2024 – Apr. 2024

- Developed a mobile app with Firebase authentication for login and account management
- Integrated Spotify API to generate personalized music recommendations
- Developed a Community Page where users can explore other accounts, view top artists, and share top songs

1Record - Cornell Health RX Winner | Python, MongoDB, ReactJS

Mar. 2024

- Developed software using LLMs to extract context from Electronic Health Records, sort patients by similarity, and predict rare condition symptoms for tailored treatments.

Omex Development | JavaScript, Node.js, MongoDB, Docker, Jenkins

Jul. 2021 – Present

- Designed and developed two applications for the Discord platform, reaching a user base of 346,075
- Automated application deployments using Docker containers
- Implemented a Jenkins pipeline for continuous integration and delivery minimizing update downtime to under 5 minutes

Silicon Studios | Lua, Blender, Roblox Studio

Jul. 2018 – Present

- Managed development of the popular Roblox game, "Drive a Tesla," achieving over 6 million visits
- Recipient of the **Sparkletime Crown of O's** virtual award for exceeding 100,000+ monthly active users

AWARDS

CDAIT IOT Challenge Finalist

May 2024

- Developed robot prototype to deliver food to students around Georgia Tech campus

Cornell Health RX Winner

Mar. 2024

- Awarded \$3,000 cash prize for top placement in Cornell hosted hackathon

Sparkletime Crown of O's

Jul. 2024

- Virtual Roblox award achieved for receiving 100,000+ monthly active users in **Drive a Tesla**

Xerox Award for Innovation and Information Technology

Jun. 2022

- Book Award for innovation leadership, pursuing tech opportunities, and guiding peers in creative problem-solving

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, Kotlin, SQL (Postgres), PHP, HTML/CSS, C#

Technologies: React, Node.js, JUnit, WordPress, Jenkins, Gradle, Git, Docker, UNity, Unreal, Debuggers, MongoDB, Amazon Web Services, VS Code, Windows, MacOS, Debian Linux, NumPy, Matplotlib, Seaborn, SciPi

Concepts: Optimization, Debugging, Communication, Software Engineering, Abstraction, Documentation, Agile, Performance Profiling/Benchmarking, Data-Driven Systems, Cross-Platform Development