Hyeokjin Jin

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EDUCATION

Georgia Institute of Technology

Aug. 2023 - May 2026

Bachelor of Science in Computer Science

Atlanta, GA

GPA: 3.90/4.00

TECHNICAL EXPERIENCE

Undergraduate Researcher

Aug. 2023 – Present

VIP Georgia Institute of Technology

Atlanta, GA

- Developed an autonomous vehicle, integrating LiDAR, GPS, and microcontrollers for real-time obstacle recognition
- Utilized ROS to communicate between microcontrollers and sensor modules, ensuring efficient data transmission
- Implemented udev rules to resolve dynamic port assignments on microcontrollers for stable hardware connectivity
- Configured network access for vehicle's computer to enable SSH connections for streamlined remote management

PROJECTS

Word Finder | Java, Python, Tesseract

May 2024

- Developed an efficient puzzle-solving program for the iOS iMessage game "Word Hunt" utilizing Java and Python
- Leveraged Tesseract OCR to automate the extraction of game board letters in real-time, greatly streamlining the data acquisition process and allowing for faster, more accurate puzzle solving without manual input
- Optimized the program's performance by implementing a depth-first search algorithm combined with a trie data structure, reducing output time by 97% through the recursive generation of all letter permutations
- Integrated various Python libraries to facilitate seamless data transfer between Java and Python, as well as for mouse input control, significantly enhancing both automation and user interaction experience

Better Spotify Wrapped | Java, Android Studio, SQL, Spotify API

Apr. 2024

- Designed and developed a feature-rich Android app that enhances Spotify Wrapped, offering customizable options for sharing saved Wrapped summaries and analyzing music data across various date ranges
- Integrated user authentication, friend lists, and user requests with SQL, enabling seamless data synchronization
- Leveraged the Spotify API to retrieve and decode user data, optimizing data handling for real-time analysis
- Delivered an intuitive interface that enhances engagement and provides insights into users' music consumption

Gopü | Java, Android Studio, SQL, Maps SDK

Feb. 2024

- Designed and developed an innovative Android application for a hackathon, enabling users to locate nearby restrooms with customizable filters and a rating and review system for improved search accuracy and user feedback
- Extracted and managed public restroom data from 80,000+ locations using SQL, optimizing query efficiency
- Integrated Maps SDK to display interactive maps and provide direct links to Google Maps for instant navigation

Work Experience

ACT/SAT Math Teacher

May 2024 - Jul. 2024

Han Academy

Montgomery, AL

- Dedicated over 300 hours of 1v1 tutoring, specializing in test-taking strategies across different ACT/SAT sections
- Guided 20+ students achieve an average score improvement of 4-6 points on ACT and 150-200 points on SAT
- Helped 80% of students achieve target scores, resulting in higher acceptance rates at top-tier universities

Hardware Manager (Part Time)

Jul. 2022 – Aug. 2022

Hyundai Mobis Alabama

Montgomery, AL

• Updated infotainment system software for 500+ new Hyundai vehicles; identified and addressed existing bugs; and resolved system errors resulting in enhanced, reliable functionality with improved user experience for the interface

Technical Skills

Concepts: Data Structures, Algorithms, System Design, Object-Oriented Programming, Problem Solving

Languages/Database: Java, Python, C, Assembly, SQL, HTML/CSS

Developer Tools: Git, Docker, VS Code, Android Studio, PyCharm, IntelliJ

Libraries/Frameworks: JUnit, React