# Bryce Hanna

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## EDUCATION

## Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science, Minor in Mathematics

Expected Graduation May 2026

• **GPA**: 4.0/4.0

• Concentration: Systems & Architecture and Theory

# SKILLS

Languages: Java, Python, C#, Lua/Luau, Typescript, Javascript, C, Rust, C++, SQL, HTML/CSS, Haskell, Kotlin, Elm

Frameworks: React.js, Node.js, Electron, Three.js, .NET, SQL Server, ROS, OpenCV, Pygame, Flask, FastAPI

Developer Tools: Git, Bash, Linux, Vim, Blender, Roblox Studio, Godot, Unreal Engine, Unity, Inkscape, Fusion 360

### EXPERIENCE

Profisee May 2023 - December 2023

Software Developer Intern

Alpharetta, GA

- Utilized C# and SQL to develop and test the Common Data Platform to standardize database access for microservices
- Applied SwaggerAPI to create a REST API endpoint for the File Attachment Service enabling the DevOps team and customers to efficiently upload and download configuration files on the backend server
- Created over 100 unit and integration tests to ensure production code quality and patched dozens of bugs in the process

## Educational Computer Science YouTube Channel (@BRicey)

March 2020 - Present

Technical Content Creator, Editor, and Relations Manager

- Script, record, and edit programming tutorials on advanced concepts in the Roblox Studio Game Engine contributing to over 45 million game visits for my subscribers
- Educate an auidence of more than 15,000 subscribers with over 2 million total views on essential CS concepts
- Analyze retention data to increase content interactions to reach an annual revenue of over \$1,500

## PROJECTS

Intake AI | Typescript, Electron.js, React.js, Generative AI, Technical Communication December 2024 - Present

- Designed and implemented a cross-platform desktop app in Electron to automate aspects of clinical psychology practices
- Worked with clients to automatically synthesize intake data into a final report using Google Gemini
- Architected an error-resilient frontend in React and robust logging for optimal user experience

Mutli-Agent Localization | OpenCV, ROS2, Python, Flask, Computer Vision August 2024 - December 2024

- Prototyped different methods to detect robot position and orientation from colors to callibrated ArUco markers
- Created a two robot system to verify the accuracy of camera tracking within 10% of the actual position/velocity
- Built a command line program on the Raspberry Pi using PiCam and OpenCV to calibrate and stream detection data

#### **B-29 Superfortress** | C, Make, Game Boy Advanced

April 2024

- Developed a Game Boy Advanced game implementing WWII aircraft flight using C
- Added features such as scrolling backgrounds and animations using intimate knowledge of Direct Memory Access
- Optimized game by studying bitmap based video buffers and limiting draw calls to include 9 custom pixel art images

## Leadership

## School of Computing Instruction at Georgia Tech

July 2024 - Present

CS 2110 Undergraduate Teaching Assistant

Atlanta, GA

- Instruct a classroom of 30 students on topics such as circuit logic, assembly, and C programming
- Assist countless students learning course material in Office Hours to facilitate mastery in circuits, assembly, and C code
- Create and debug teaching tools such as simulators and autograders to aid student learning

#### Flowers Invention Studio

Prototype Instructor

May 2024 - Present

Atlanta, GA

- Instruct users on woodworking, metalworking, 3D printing, and more to realize their project ideas
- Maintain and service the tools in the shop, cleaning and fixing where needed in order to optimize operations
- Fabricate woodworking and woodturning projects as a Woodworking Apprentice to gain specialized skills