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, Rust, Typescript, Javascript, C, C++, SQL, HTML/CSS, Haskell, Kotlin, Elm

Frameworks: React.js, Node.js, Three.js, .NET, SQL Server, Pygame, Flask

Developer Tools: Git, Vim, Blender, Godot, Unreal Engine, Unity, DaVinci Resolve, Inkscape

Volunteering: Central Night Shelter, Blessings in a Backpack, MUST Ministries

Student Organizations: Phi Sigma Kappa Fraternity, Wrestling Club, Invention Studio

Interests: 3D Printing, CAD, 3D Modeling, Juggling, Woodworking, Metalworking, Lockpicking, Creative Writing

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 efficienctly upload and download configuration files
- 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
- 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

Low Cost Aerial Autonomy Vertically Integrated Project January 2024 - Present

Researcher

- Collaborated with team members to characterize and implement a P51 Mustang into a custom flight dynamics model
- Leveraged python with Matplotlib and Pandas to visualize Monte Carlo Tree Search algorithms with a 80% win rate in dogfighting simulations with autonomous P51s and F16s

Projects

Portfolio Website | *ThreeJS, React, React Three Fiber, Jotai, Typescript, Blender* January 2024 - May 2024

- Developed a frontend web app to showcase projects and experience in an interactive 3D environment
- Integrated declarative React components and Jotai state management with animated Blender models
- Created models and animations in Blender from scratch using low-poly 3D modeling techniques

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 the game by studying bitmap based video buffers and limiting draw calls

GHEvolution | *Python, Pygame, Neuroevolution, Articial Intelligence* July 2022

- Studied Natural Selection and Evolution to derive how generational evolutionary algorithms function
- Implemented a simulation using Python to demonstrate learning by survival of the fittest over generations
- Visualized the artificial life with Pygame and analyzed mock brain structures with Matplotlib

ColorChaos: THE NEXT GENERATION | *Luau, Roblox Studio, Blender* February 2020 - June 2020

- Developed a Roblox game with many game modes and tools, garnering over 2 million visits and 60 concurrent players
- Released monthly updates and published YouTube content to earn over $800