

Brett M Hixon

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- Summary:** Junior Computer Science major at Rose-Hulman with a 3.97 GPA driven by an innovative and proactive nature. Eager to apply my rigorous academic understanding in full-stack and systems development. Experienced in languages like C, C#, Javascript, and Java and modern development frameworks.
- Education:** **Bachelor of Science, Computer Science** **May 2027**
Rose-Hulman Institute of Technology, Terre Haute, IN GPA: 3.97/4.0
Minor in Japanese (in progress)
Related Courses: Introduction to Web Programming, Design and Analysis of Algorithms, Operating Systems, Introduction to Database Systems, Computer Architecture I
- Skills:**
Software: Java, C, C#, ARM Assembly, JavaScript, Verilog, Python, Lua
Frameworks & Technologies: Bootstrap, .NET (ASP.NET Core), Entity Framework Core, SQL, React, React Native, HTML, CSS
Systems: Windows, macOS, Linux
Language: Elementary Japanese and Spanish
- Projects:** **Game Sniper Database Application** **April-May 2025**
- Created a Java Swing application that connects with a Microsoft SQL Server instance to provide video game information to players and developers
 - Scraped Steam utilizing the Playwright API for initial population data
- Threading Library in xv6** **February 2025**
- Implemented a pthread-like threading library for the xv6 operating system using C
 - Developed synchronization mechanisms utilizing spinlocks and ensured proper scheduling of user-space threads
- Virtual Bulletin Board Web App** **June-August 2024**
- Used HTML and JavaScript to develop a frontend program for a virtual bulletin board
 - Utilized Firebase for backend operations such as user authentication and database storage
 - Enhanced frontend appearance using Bootstrap for styling
- Side-Scrolling Arcade Game** **January-February 2023**
- Designed and implemented a Java-based arcade game using Swing for the graphical interface
 - Developed custom game physics, collision detection, and event handling
- Experience:** **Rose-Hulman Ventures** **January 2025-May 2025**
Software Engineer Intern
- Researched and practiced multiple web and mobile app frameworks such as React/React Native, ASP.NET Core, and Entity Framework Core
 - Created internal documentation for future engineer interns to reuse when getting started
 - Gained experience in full-stack app development and integrated databases in a collaborative environment
 - Refactored data retrieval methods for an internal inventory management system
- Rose-Hulman Institute of Technology** **September 2024-Present**
Systems Programming Teaching Assistant
- Assisted students with C and ARM Assembly programming-related questions during in-class lab
- Honors:** Heminway Scholar **May 2025**