## **Brett M Hixon**

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**Summary:** Junior Computer Science major at Rose-Hulman with a 3.98 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: 3.98/4.0

Minor in Japanese

Related Courses: Programming Language Concepts, Operating Systems, Database Systems, Software Requirements Engineering, Software Design, Computer Architecture II, Natural Language Processing

**Skills:** Software: Java, C, C#, ARM Assembly, JavaScript, Verilog, Python, Lua, RISC-V Assembly, Scheme

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

#### **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 and Web Development Teaching Assistant

- Assisted students with C and ARM Assembly programming-related questions during in-class lab
- Graded homework assignments for introductory web development

#### **Projects: Game Sniper Database Application**

April-May 2025

- Developed a graphic application with Java Swing integrated with Microsoft SQL Server to provide dynamic video game data analysis solutions for an array of end users
- Leveraged the Node.js Playwright library to efficiently extract external platform 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

**Honors:** Heminway Scholar May 2025