Benjamin Schreiber

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Education

Washington State University, B.S Computer Science Pullman, WA   **Graduating May 2026**

Experience

Software Engineer Intern at IntelliTect   **4/2024 - 8/2024**

Pesticide Information Center OnLine (https://picol.cahnrs.wsu.edu/)

- Optimized search performance by implementing query indexing with Lucene.NET, enabling full-text indexing and efficient query execution with significantly reduced response times.
- Recreated a decade-old SQL Server database in .NET, enhancing data integrity and access speed and removing redundancies.
- Redesigned the front end with Vue.js and Vuetify to deliver a modern search engine UX.

Audience Interactive Systems (https://ais.team/)

- Designed and implemented a full-stack application enabling large venues to host seamless real-time polls, trivia, and live events, leveraging .NET, Azure, SignalR, and SQL Server.
- Developed a real-time, dynamic word cloud in TypeScript that processed a sliding window of expiring votes via a native .NET concurrent queue, resizing and reshaping based on incoming data.

Software Engineer Intern at IntelliTect   **6/2022 - 10/2023**

1ON1 Piano (https://1on1piano.com/)

- Developed a full-stack "File Sharing Library" in Flutter and .NET, integrating Azure Blob Storage for efficient file management and a SignalR channel for real-time updates, enabling teachers to share sheet music with students.
- Researched and integrated cutting-edge Flutter libraries Riverpod and GoRouter to modernize codebase and replace deprecated GetX stack.
- Addressed WebRTC layer issues, reducing network related dropped calls by over 80%.

Projects

Virtual Packet Tracer *(https://bschr.dev/vpt) (https://github.com/bens-schreiber/virtual-packet-tracer)*   **2024 - Present**
- Created a simulation of Ethernet, Layer 2 Switches, Layer 3 Routers and IP Networking in Rust.
- Engineered the IEEE 802.1w Rapid Spanning Tree (RSTP) algorithm in Rust.
- Implemented internet standard packets: Ethernet II, Ethernet 802.3, ARP, BPDU, RIP, IPv4

Skills

Languages: C# **|** Python **|** Typescript **|** SQL Server **|** PostgreSQL

Frameworks: ASP.NET **|** Entity Framework **|** xUnit **|** Django **|** Pytest **|** Vue **|** Flutter

Accolades

Triangle Fraternity Founder & President (Internal)   **2023 - Present**