

Conor Fryer

EDUCATION

Union College (Schenectady, NY)

GPA: 3.6/4.0

B.Sc. in Computer Engineering, Seward Fellow (Honors Program with Organizing Theme Minor)

Jun. 2027

- **Recent Courses:** Algorithms, Data Structures, Signals and Systems, Network Protocols, Regression Analysis, Ethical Theory

EXPERIENCE

Software Developer Intern

Jun. 2025 – Aug. 2025

Siemens Energy – Grid Software

Schenectady, NY

- Designed and prototyped a **metadata-driven dialog system** in **PSS@E** by parsing enterprise **APIXML** into structured **JSON**, enabling dynamic parameter input forms with validation, tooltips, and search.
- Embedded a **Chromium (CEF)** browser view inside **PSS@E's** legacy **MFC application** to host **Angular/TypeScript** dialogs that adapt directly to API definitions, laying the groundwork for future modernization of simulator workflows.
- Automated reproducible builds with **CMake + Visual Studio 2022** and documented cross-language integration (**Fortran, C++, Python, Angular**) to support ongoing adoption by the Grid Software engineering team.

Research Support Specialist

Jun. 2024 – Aug. 2024

Research Foundation for the State University of New York

Albany, NY

- Developed a **haptic-based smart white cane** for visually impaired individuals, using a computer vision/machine learning model trained on 1,145 images, achieving an **F1 score of 79%** for crosswalk detection.
- Integrated **Bluetooth LE** to provide real-time haptic feedback, enhancing navigation without disrupting standard white cane use.
- Collaborated on prototype design, focusing on compactness and affordability, with plans for direct user testing.

PROJECTS

TrueCritic

Mar. 2024 – Present

HackHarvard

[truecritic.vercel.app](#)

- Developed a full-stack web application using **Next.js** to help users find top-rated restaurants and hotels, cutting search time by **50%** through optimized filtering based on location, reviews, and industry accolades.
- Integrated **Google Maps API** for location-based search and filtering of thousands of reviews.
- Implemented custom ranking logic based on ratings and review counts, improving relevance of results and user experience.

Discogs Grail Finder

Jul. 2024 – Present

BigRed// Hacks (Cornell)

[github.com/conorfryer/discogs_grail_finder](#)

- Developed a **browser extension** to filter **Discogs vinyl listings** by price, rating, and “want/have” ratio, cutting search time by 60%.
- Created real-time filters that saved collectors **3-5 hours weekly** while improving search accuracy for rare records.
- Streamlined sorting of thousands of listings, enabling collectors to locate high-demand items faster.

CAMPUS INVOLVEMENT

Vice President/Treasurer (Junior General Manager)

Aug. 2023 – Present

WRUC

[wruc.union.edu](#)

- **Spearheaded a \$50,000 modernization initiative**, overhauling broadcasting infrastructure and transforming the station into a potential hub for a multi-college radio network.
- Implemented streamlined workflows that cut broadcasting setup time by **40%**, while introducing scalable technologies, enabling the station to handle a **20% increase** in show production capacity.

Treasurer

Jan. 2024 – Present

IEEE

[muse.union.edu/ieee](#)

- Collaborated with executive members to organize **5+ technical workshops** and networking events, increasing participation by **25%**.
- Managed funding and logistics, ensuring efficient allocation for workshops, events, and guest speakers.

SKILLS

Languages: C++, Python, Java, JavaScript | **Frameworks:** Next.js, Angular, Bootstrap | **Tools:** CMake, Git, Linux, Visual Studio, Edge ML | **Automation & Integration:** Shell Scripting (PowerShell, Bash), Embedded Systems, API Integration, Build Automation | **Other:** German (Professional Proficiency)

INTERESTS

Electronic Music Production, Vinyl Collecting, Film, Ice Hockey, Rowing