#### **Quinn Patwardhan**

quinnpatwardhan.com - github.com/qpxdesign

### **Experience**

Georgetown University Department of Computer Science InfoSense Artificial Intelligence Research Lab

Research Intern

May 2023 - November 2023

- Worked alongside PhD students to research and develop around Offline/Online Reinforcement Learning, Machine Learning, Information Retrieval, and Large Language Models
- Studied various methods in building Offline Chatbots and Model-Free Agents
- Replicated Python-Based Reinforcement Learning Models using CUDA/PyTorch on GPU
- Attemptted the National Institute of Standards and Technology's TREC iKAT Challenge using Python, Cuda, Transformers, and Git
- Wrote paper and am set to attend and present at the international college-and-industry level Text Retrieval Conference at the NIST
- Ranked well above median scores of submissions from several institutions around the world

#### Wider Circle - Volunteer

**August 2022 - Present** 

- Helped greet volunteers and unload, sort, and distribute donations
- Worked with other volunteers to lift and move heavy furniture

## **Projects**

### MarcMap (marcmap.app - App Store Link)

**December 2022 - Present** 

- Created a interactive web app that users to track the live location of MARC (Maryland Area Rail Commuter) Trains using data from the MTA (Maryland Transit Authority)
- Uses React.JS, JSX, HTML, and CSS for frontend, and an Express.js Based Backend API to format GTFS-RS Data
- Developed, Published, and Maintained IOS App Version using Swift 5/SwiftUI and XCode that received thousands (10,000+) of downloads and 100+ daily users
- Maintated it and took user feedback to enhance user experience, received many 5 Star Reviews

#### AmTrack (App Store Link)

May 2023 - Present

- Built an IOS/Android Amtrak Train Tracking App in React Native with an Express is backend
- Deployed App to Apple App Store and Google Play Store in compliance with store guidelines
- Handled dozens of daily users and thousands of total downloads (3,000+), scaled backend systems appropriately
- Received 5 Star Reviews and frequently updated and improved based on user feedback

# CS Club Website (link)

September 2022 - Present

- Built a fully custom website from the ground up with Authentication and User Management, using React.JS, HTML, Javascript, MySQL, Node, Express.js and CSS3 (csclub.social)
- Encouraged member participation with blogging system, automatic project web deployment, and contact system
- Incorportated user feedback and worked with School Adminstration to enable use of Google Authentication for increased security and better user identification

### **Technology Skills**

JavaScript, ReactJS, Typescript, CSS, HTML, Git, HTTP, Node, Python, Java, NGINX, Linux, Ubuntu Server, Unix Terminal, MySQL, C Sharp, XNA, Swift, PyTorch, React Native, Pip, Conda, Cuda, Flask, Mapbox GL JS API, Google Authentication, RESTFul APIs, Docker, LaTeX

Adobe Illustrator, Adobe Photoshop, Adobe Lightroom, Adobe Indesign, Adobe Lightroom, Adobe Premiere Pro, Figma

Google Sheets/Microsoft Excel, Visual Studio Code, XCode, Neovim, Overleaf