## FLETCHER GORNICK

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## **EXPERIENCE**

# Software Engineer Intern, API Platform Target Technology

- **i** Jun 2022 Aug 2022
- Minneapolis, MN
- Developed a program to dynamically generate reverse proxy configuration. Used to map incoming traffic to specifed backend clusters. Written in Go and provides configuration for Envoy Proxy.
- Worked in an Agile team of 10, collaborating and communicating with other teams in different disciplines.

Go	Docker	Kubei	netes	Fastly	Ruby	Hugo	SQL
Node	e.js Java	Script	Git	Jenkins	Python		

# Undergraduate University Research University of Minnesota, Twin Cities

- **a** Jan 2022 May 2023
- Minneapolis, MN
- Developed program to automatically generate Parson's style problems for entry level CS students.
- Questions are outputed to QTI and GIFT format for use in Canvas and Moodle courses respectively.
- Optionally, introduces mutations to input code to provide a variety of question types, with hopes of improving students ability to analyze code.

Python Express Shell Scripting XML Gift QTI

# Undergraduate Teaching Assistant University of Minnesota, Twin Cities

- **i** Jan 2022 May 2023
- Minneapolis, MN
- Introduced C++ as well as basic concepts of object oriented programming.
- Taught design patterns to speed up development process and SOLID design principles for project maintainability.
- Showed how to structure projects with Unified Modeling Language (UML), stressing the importance of program design/analysis.

C++	Design Patterns	UML	JavaScript	HTML	Docker

## **EDUCATION**

### University of Minnesota, Twin Cities

#### **B.S. in Computer Science & Mathematics**

**■** 2019 - 2023

Minneapolis, MN

Cumulative GPA: 3.96/4.0

#### M.S. in Computer Science

**2023** - Present

Minneapolis, MN

**Relevant Coursework**: Operating Systems, Algorithms, Software Engineering, Internet Programming, Graph Theory, Cryptology, Linear Codes, Matrix Theory

## **PROJECTS**

### **Dynamic Proxy**

### Envoy proxy configuration generator

- **i** July 2022 **f** fmgornick/dynamic-proxy
- Program for users to send configuration to envoy proxy at runtime, without the need to restart
- This allows us to add/delete/change the upstream destination of incoming traffic dynamically for real-time configuration updates

Go	Envoy	bash	OpenSSL	Docker

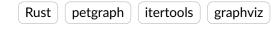
# Search & Rescue Simulation Drone physics simulation written in C++

- **昔** Apr 2021 **♠** fmgornick/drone-sim
- A program that takes a 3D texture of Minneapolis and simulates drone movement with the use of design patterns and object oriented programming



## Graph Data Structure Library provides collection of graph algorithms

- Made my own implentation of a graph data structure and added as many graph algorithms as I remember learing in my Graph Theory class



## **SKILLS**

Skills I've worked with directly. Ordered by approximate proficiency/relevance.

### **Programming & Other Languages**



### Frameworks, Engines, Libs, & Databases

Node.js	React	NumPy	MySQL	
OpenCV	TikZ	petgraph	Actix	
Envoy				

### **Development Tools & Environment**

Git	UNIX/Linux	GNI	J Vim	Emacs
Tmux	Jenkins	AWS	Doxyg	en