# FLETCHER GORNICK

@ fletcher@gornick.dev

fletcher.gornick.dev

fletcher-gornick

fmgornick

## **EXPERIENCE**

# Software Engineer, Kafka Engineering Target Cloud & Compute

July 2023 - Present

Minneapolis, MN

- Orchestrated and maintained 400+ Kafka clusters for Target's .com and PCI data pipelines, implementing MirrorMaker, observability (Grafana, OpenTelemetry), and major storage migrations (NFS → iSCSI).
- Built Spring/Micronaut microservices, CLI tools, and automation scripts for topic management, cluster configuration, and troubleshooting to improve reliability and developer efficiency.

Kafka	Linux	Spring	Micr	onaut	NFS	iscs	OTel
Grafana	Mirro	orMaker	Git	Kuber	netes	Go	Python

# Software Engineer Intern, API Platform Target Technology

**i** Jun 2022 - Aug 2022

- Minneapolis, MN
- Built a Go-based tool to dynamically generate Envoy reverse proxy configurations, enabling seamless traffic routing for backend clusters.
- Collaborated within a 10-member Agile team, coordinating across disciplines to deliver reliable API infrastructure solutions.

Go	Do	cker	Hapro	оху	Envoy	Ruby	Hugo	SQL
Node	e.js	Javas	Script	Git	Pytho	on		

## **Undergraduate Teaching Assistant**

#### University of Minnesota, Twin Cities

**i** Jan 2022 - May 2023

- Minneapolis, MN
- Introduced students to C++ and foundational concepts of OOP.
- Taught design patterns to improve development efficiency and SOLID principles to ensure long-term maintainability.
- Guided students in structuring projects using Unified Modeling Language (UML), emphasizing thoughtful program design and analysis.

C++	Docker	UML	Design Patterns	JavaScript	HTML

## **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

**2**023 - Present

Minneapolis, MN

Cumulative GPA: 3.92/4.0

**Relevant Coursework**: Operating Systems, Machine Architecture, Computer Graphics, Advanced Algorithms, Robotics, Graph Theory, Matrix Theory, Linear Codes

### **PROJECTS**

# Binary Space Partition Demo BSP tree visual simulation written in C

- 苗 April 2025 🞧 fmgornick/bsp
- Visualizes the BSP tree construction algorithm used in CPU-rendered games like DOOM and Quake II.
- It's also compiled to WebAssembly. Try it out at https://fletcher.gornick.dev/projects/bsp.

$\mathcal{C}$	OpenGL	Raylib	Emscripten
	Opende	Itayiib	Linscripten

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

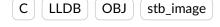
- Apr 2021 fmgornick/drone-sim
- Built a C++ simulation modeling drone movement over a 3D map of Minneapolis using object-oriented design and software design patterns.
- Implemented Canny edge detection using a sequence of convolution filters to provide computer vision capabilities for the drone.



### **CPU Raytracer**

#### **CPU-based 3D renderer**

- Implemented a CPU ray tracer that loads .obj models and outputs ray-traced PNG images with realistic lighting.



### **SKILLS**

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

### **Programming/Scripting Languages**

C/C++	Go Ru	ust Jav	/a (	Python
Bash	Assembly	GLSL	) (Ty	/peScript
Haskel	HTML+	CSS &	TբX	OCaml

#### Software, Frameworks, & Libraries

Kafka	OpenGL	GLFW	/ Micronaut
Spring	Gradle	gRPC	MirrorMaker

### **Development Tools & Environment**

