

Timothy Liakh

New York, NY | timothy@liakh.com | 408-455-6189

<https://liakh.com/> • <https://www.linkedin.com/in/timothy-liakh/> • <https://github.com/Vitisadi>

EDUCATION

Rensselaer Polytechnic Institute

Master of Science in Computer Science (*concurrently enrolled*)

Bachelor of Science in Computer Science (*GPA: 3.83 / 4.00*)

Courses: Data Structures, Algorithms, Web Development, Database Systems, Computer Organization, Artificial Intelligence, Data Sci

Troy, NY

January 2027

WORK EXPERIENCE

Datadog

June - August 2025

Software Engineering Intern - Python, Go(lang)

New York, NY

- Won 1st place out of 500+ in a company hackathon by building Workflow Automation auto-suggestions and find-tuning an OpenAI model on 70K+ points, running 90% faster than the previous version (3-5s vs 40s).
- Enabled Linux bare-metal support for Datadog OpenTelemetry Collector (DDOT) by adding OCI packaging and installer builds, reaching 5K+ new hosts and reducing setup time from 20+ minutes to a one-click install.
- Integrated remote configuration into DDOT, enabling distributed concurrent updates to 1,000+ agents in under 5 minutes.

WebstaurantStore

May - August 2024

Software Engineering Intern - C#, Blazor, SQL, Agile Development (Scrum)

Remote

- Reduced alerting costs by over 90% by cutting 50K+ redundant weekly Sentry logs with a C# ASP.NET service.
- Saved 10% in load time (~500 ms/query) on SQL analysis of 1M+ shipping reports by implementing pre-filtering procedures
- Refactored MediatR API endpoints to support dynamic filtering and improve data flow to the Blazor/Kendo UI frontend.

Grid Protection Alliance

May 2023 - May 2024

Software Engineering Intern - C#, .NET, React, TypeScript, SQL

Remote

- Spearheaded a new Grafana data source plugin using React and TypeScript to simultaneously visualize over 750,000 phasor data points, including 30+ custom functions for advanced analysis and electric line fault detection.
- Reduced analysis latency by 15% through a parallelized C#/.NET backend that aggregates and evaluates data at runtime.

LEADERSHIP

Rensselaer Center for Open Source – Coordinator

August 2024 - Present

- Leading a group of 500+ students spanning 120+ different open source projects in contributing to open-source work.
- Work closely with 30+ mentors and provide hands on experience through guiding 50+ topic specific workshops.
- Actively contributing and supporting large-scale open-source initiatives in collaboration with IBM, Red Hat, and Microsoft.

PROJECT EXPERIENCE

CartX - Project Lead

September 2023 - Present

JavaScript, React, Node.js, Express.js, Python, Selenium, MongoDB

- Save users over 10% on average grocery orders by leading a 6-person team to develop a cross-store price comparison platform with direct purchasing through a private Instacart partnership.
- Scrape and store 100K+ grocery items from dozens of stores in MongoDB via automated Python Selenium pipelines.
- Reduced average query time 40% through semantic search with vector embeddings, enabling faster, more relevant results.

EcoVISION - Hack RPI Best AI Hack Winner

November 2024

Python, Flask, React, OpenCV, OpenAI

- Increased waste sorting efficiency and classification accuracy by 20% in simulation by building an AI powered system that analyzes conveyor belt footage in real time and provides clear separation instructions and recycling explanation.
- Achieved 99%+ classification accuracy by analyzing conveyor footage with OpenCV and custom Open AI models.

Finance For All - 1st Place SHPE-NSBE Hackathon

February 2024

JavaScript, React, Express JS, Google Gemini

- Reduced average user research time by 5–10 hours by creating an AI platform to simplify bank loan and credit selection.
- Integrated Google Gemini, creating responsive chatbot and data collection on 1000+ banking options to aid financial literacy.

SKILLS & LANGUAGES

Programming Languages: Go, C#, Python, JavaScript, TypeScript, C++, Java

Technologies & Libraries: ASP.NET, Blazor, Razor, React, NodeJS, Express.js, Selenium, PyTorch, Azure DevOps, Docker

Databases & Tools: SQL, MongoDB, Firebase, GitHub, Git, Jira, Linux, Postman, Visual Studio, Coder, JSON