

ANDREY PITERKIN

+1 (425)-241-7322 | andrey.piterkin@gmail.com | [linkedin/Andrey](https://www.linkedin.com/in/Andrey) | [github/Andrey](https://github.com/Andrey)

EDUCATION

Northeastern University

Sep 2021 - May 2025

B.S. in Computer Science, Overall GPA: 3.94 / 4.00

Boston, MA

Coursework

Compiler Design, Object-Oriented Design, Networks & Distributed Systems,
Algorithms & Data, Graduate Advanced Algorithms, Operating Systems,
Programming Languages, Computer Graphics, Logic & Computation

EXPERIENCE

Datadog

Sep 2024 - Dec 2024

Incoming Software Engineer Intern

New York, NY

Databricks

May 2024 - Aug 2024

Software Engineer Intern

Bellevue, WA

- Designing **extensible test framework** for billing pipeline, focused on stressing resource lock-out latency for limited accounts.

MathWorks

Jan 2024 - Apr 2024

Software Engineer Intern

Natick, MA

- Enhanced **C++** fixed-point arithmetic operations in MATLAB to build full precision dot product and matrix multiplication **type APIs** targeting **fixed-point neural nets**.
- Optimized SimuLink **C codegen** by selecting **50% smaller types** for neural net matrix operations.
- Built foundation for **range math engine** in MATLAB, increasing arithmetic operation **precision by 10%**.

Amazon

May 2023 - Aug 2023

Software Engineer Intern

Seattle, WA

- Designed new service to generate **risk-based** disbursement policies for **9.7+ million** Amazon.com sellers, saving **\$600k+** dollars from bad actors while **reducing** seller friction.
- Implemented path-critical functionality for reserves, auditing, and disbursement service re-architecture effort with **AWS**, **TypeScript**, and **Java** to provide low-latency seller statistics.
- Created **scalable** architecture to process **1.1 million+** seller risk scores **daily** with **Lambda** and **Kinesis**.

S3 Global

May 2022 - Aug 2022

Software Engineer Intern

Redmond, WA

- Developed and documented an abstraction layer in **C++** for a high-speed camera SDK.
- Implemented stream interface between abstraction layer and **C#/.NET** application via shared frame buffers.
- Designed a comprehensive network-device monitoring system and error detection pipeline for the entire company device fleet, utilizing **Python** and **SQL Server**.

AWARDS/PROJECTS

x86_64 Compiler

Jul 2022

- Designed a compiler for a dynamically-typed language in **OCaml** targeting **x86_64 assembly** with a **C runtime**.
- Supported features such as **first-class functions**, **continuations**, and stop-the-world **garbage collection**.

Trading Algorithm

Jul 2022

Contestant at Jane Street's Electronic Trading Challenge

Seattle, WA

- Achieved **10th** out of 32 teams by implementing **Python** strategies for bond penny-pinching and ADR/ETF arbitrage.

SigLo

Feb 2022

Hackbeanpot 2022 Winner: Most Technically Challenging

Boston, MA

- Built a hand-gesture based interface for scrolling and navigating with a computer through camera, targeted at improving navigation accessibility with **MediaPipe** and **Pynput**, published on **PyPi**.

TECHNICAL SKILLS

Programming Languages
Frameworks & Technologies

Java, Python, C/C++, JavaScript, MySQL, Postgres
OpenGL, React, AWS (Lambda, Kinesis, EC2), Node, Git, TensorFlow