ANDREY PITERKIN

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EDUCATION

Northeastern University Sept. 2021 - May 2025
B.S. in Computer Science, Overall GPA: 3.95 / 4.00 *Boston, MA*
Coursework Compiler Design, Networks & Distributed Systems, Advanced Algorithms
Software Development, Computer Systems, Programming Languages

EXPERIENCE

Datadog Sept. 2024 - Dec. 2024
Incoming Software Engineer Intern *New York, NY*

Databricks May 2024 - Aug. 2024
Software Engineer Intern *Bellevue, WA*

- Creating extensible test framework for billing infrastructure in **Scala and Apache Spark** to reduce system test cost and improve dev velocity.

MathWorks Jan. 2024 - Apr. 2024
Software Engineer Intern *Natick, MA*

- Enhanced **C++** fixed-point operations in MATLAB to build full precision dot product and matrix multiplication type-selection APIs, increasing precision by **7%** for **fixpoint neural nets**.
- Optimized SimuLink **C codegen** by selecting **50% smaller types** for neural net matrix operations.

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-architecure effort with **AWS**, **TypeScript**, and **Java** to provide low-latency seller statistics.
- Created architecture to process **4.9 million+** seller risk signals 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 for **12 cameras**.

AWARDS/PROJECTS

Rust Operating System Dec. 2023 - Present

- Implementing a small Rust operating system, with a focus on systematic design.

x64 Compiler Jan. 2024 - Apr. 2024

- Designed a dynamically-typed language compiler in **OCaml** targeting **x86_64** with a **C runtime.**
- Supported features such as first-class functions, native continuations, exceptions, and Cheney's semi-space garbage collection algorithm.

TECHNICAL SKILLS

Programming Languages Java, Python, C/C++, TypeScript, MySQL, Postgres
Frameworks & Technologies OpenGL, Vim, AWS, React, Node, Git, Apache Spark