# ANDREY PITERKIN

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### EDUCATION

Northeastern University		Sept. 2021 - May 2025
B.S. in Computer Scie	ence, Overall GPA: 3.95 / 4.00	Boston, MA
Coursework	Compiler Design, Networks & Distributed Syster	ns, Advanced Algorithms
VDEDIENICE	Software Development, Computer Systems, Prog	ramming Languages

## EXPERIENCE

Databricks Incoming Software Engineer

#### Datadog

Software Engineer Intern

- Designed Change Data Capture system for new internal Cloud Resource Manager in Go, increasing discoverability of 10000+ network infrastructure resources such as load balancers and DNS records.
- Upgraded **React** UI to allow free text and regex searching, backed by **Elasticsearch** cluster, replicated from **DynamoDB** using a custom connector.

#### Databricks

Software Engineer Intern

- Spearheaded live testing for Databricks company-wide billing pipeline in Scala and Apache Spark, reducing component integration test cost by 92%.
- · Built billing test framework in Scala, improving dev velocity from start to deployment by 10+ hours.
- · Targeted complex testing scenarios such as chaos testing, load testing, and automated alert testing.

## MathWorks

Software Engineer Intern

- $\cdot$  Enhanced C++ fixed-point operations in MATLAB to build full precision dot product and matrix multiplication APIs for embedded targets.
- $\cdot$  Optimized SimuLink C codegen by selecting 50% smaller types for neural net matrix operations.

#### Amazon

Software Engineer Intern

Natick, MA

Jan. 2024 - Apr. 2024

Present

Bellevue, WA

New York, NY

Bellevue, WA

Sept. 2024 - Dec. 2024

May 2024 - Aug. 2024

May 2023 - Aug. 2023 Seattle, WA

- $\cdot$  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.

## PROJECTS

#### x64 Compiler

Jan. 2024 - Apr. 2024

 $\cdot$  Designed a dynamically-typed language compiler in  $\mathbf{OCaml}$  targeting  $\mathbf{x86\_64}$  with a  $\mathbf{C}$  runtime.

· Supported features such as first-class functions, native continuations, exceptions, and Cheney's semi-space garbage collection algorithm.

## TECHNICAL SKILLS

Programming Languages Frameworks & Technologies