

Noble Mushtak

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WORK EXPERIENCE

Netflix

Software Engineer (L4)

Jan 2026 – Present

Los Gatos, CA (Remote)

- Designing and developing new features in Netflix Storage Layer, which provides Netflix platforms with low-latency access to cheap object storage and optimizes storage across multiple backend systems such as EBS and S3

Snowflake

Software Engineer (IC2)

Jul 2023 – Jan 2026

Menlo Park, CA

- Designed and developed performance enhancements for DELETE, UPDATE, and MERGE operations in Snowflake's Gen2 warehouses using C++ as part of the Storage and Scan team
- Drove the months-long rollout of an up-to-4.4x performance enhancement impacting 99% of Snowflake customers by rapidly investigating and fixing bugs caused by the feature's rollout
- Led multiple root-cause investigations and postmortems of complex production incidents involving distributed systems, concurrent programming, and interactions between 3+ different teams' features
- Mentored 3 new engineers, resulting in a faster onboarding experience and increased productivity
- Created the design and mentored an engineer on a project for updating Snowflake's execution engine to read Iceberg deletion vectors from the Iceberg v3 specification
- Investigated and triaged hundreds of customer issues to teams across Snowflake's SQL organization as part of a regular support rotation
- Advised multiple other teams developing features interacting with Storage and Scan code
- Reviewed multiple pull requests a week to ensure they followed Snowflake's standards for C++ best practices

Snowflake

Software Engineer Intern

May 2022 – Aug 2022

San Mateo, CA

- Adapted the Eisel-Lemire algorithm to improve the accuracy of conversions from a decimal fixed-point number type to an IEEE 754 binary floating-point number type in Snowflake's SQL engine using C++
- Coauthored a technical note with Prof. Daniel Lemire about proving the Eisel-Lemire algorithm correct for all 64-bit significands using the theory of continued fractions

Northeastern University

Research Assistant, Programming Research Laboratory @ NEU

May 2021 – Jun 2023

Boston, MA

- Coauthored two academic papers with Prof. Amal Ahmed published in PLDI, a major CS research conference
- Developed key proofs for an academic paper presenting a new method for verifying sound language interoperability
- Developed large parts of a Rocq project which formally verified type soundness for RichWasm, a version of WebAssembly with an enriched type system for supporting safe shared memory interoperability
- Won third-place in the undergraduate division of POPL 2022's Student Research Competition

Spin Analytical

Software Engineer Intern

Jun 2017 – Aug 2019

Berwick, ME

- Developed multithreaded Qt5 application using C++ and Boot2Qt for a custom drug synthesis instrument

TECHNICAL SKILLS

Languages: C++, Java, Python, Rocq, Latex, Rust, HTML, CSS, JavaScript

Developer Tools: Linux, Git, GDB, Valgrind, Docker, Emacs, IntelliJ IDEA, Google Apps Script, GitHub Pages

ACTIVITIES

Competitive Programming

Dec 2014 – Present

- Served as team lead for Northeastern University's competitive programming team
- Competed in ACM-ICPC World Finals 2021, the largest worldwide university-level programming competition, placing 86th in the world out of a field of 3,450 universities from 111 different countries
- Qualified for Meta Hacker Cup 2022 Round 3 and placed 145th out of 27,604 overall contestants

Northeastern Putnam Team

Sep 2019 – Apr 2023

- Explained solutions in weekly meetings to problems from the Putnam Competition, the principal mathematics competition for undergraduate students in the United States and Canada
- Placed 150th out of 2,975 students in Putnam 2021, 164th out of 3,415 students in Putnam 2022

EDUCATION

Northeastern University

Bachelor of Science in Computer Science and Maths, GPA: 4.0/4.0

Apr 2023

Boston, MA