LINA NGUYEN

EDUCATION

University of British Columbia

Sept 2016 - Apr 2022, Vancouver BC

Engineering Physics, Computer Science Specialization – Bachelor of Applied Science (BASc)

GPA: 3.7 / 4.0

Coursework: Software Engineering, Data Structures & Algorithms, Relational Databases, Machine Learning,
Probability, Applied Linear Algebra, Digital Systems & Microcomputers, Mathematical Proof, Operating Systems

 Involvements: Physics Teaching Assistant (2019-2022), Math Teaching Assistant (2017-2019), Orbit (Satellite Design Team) C++ Infrastructure Software Developer (2017-2018), Orientation Leader (2017)

WORK EXPERIENCE

TikTok - Software Engineer, Backend Infrastructure

Feb 2023 - Present, Seattle WA

- Increased GMV of TikTok Shop by 30% (\$43M) by designing a technical solution to reduce top-seller onboarding time by 75%; Led a team of engineers in the implementation, using Go, RocketMQ, ElasticSearch, and SQL.
- Increased marketplace safety by 55% by leading, architecting, and prototyping technical software solutions for 10+ large-scale, cross-team projects in **Go**, prioritizing performance while considering tradeoffs and optimizations.
- Acted as the US point-of-contact for the Seller Violation Center by cultivating extensive and in-depth knowledge about the technical architecture, business strategy, and future roadmap of the core product.
- Led technical design reviews and standardized engineering processes, reducing on-call volume by 20%.

Meta – Software Engineer

Nov 2022, Menlo Park CA

• Impacted by Meta's mass layoffs in the first week.

Coursera – Software Engineer (Internship)

Aug – Dec 2021, Mountain View CA

 Increased software quality, robustness, and efficiency by over 30% while reducing errors and redundant work by migrating React.js components to a novel design system, using TypeScript and JavaScript.

Later – Software Engineer, Machine Learning Infrastructure (Internship)

May – Aug 2021, Vancouver BC

- o Increased output accuracy by over 50% for Later's most used paid feature, used 50,000+ times a week, by developing a scalable **Flask** and **Python** API, enabling novel machine learning models to be used for the 1st time.
- Eliminated 80% of API-related production failures by implementing automated API documentation and diffing.

Intel – Software Engineer, Backend Infrastructure (Internship)

May - Dec 2020, Vancouver BC

- o Organized 6 million data entries by developing a scalable telemetry query application with **SQL**, **Python** and **Flask**.
- Reduced runtimes by 35% by taking initiative to upgrade, optimize, and automate Intel's Python workflows.
- Awarded via Intel's Recognition Program for quality, completeness, and detail of work.

TRIUMF – Software Developer, Low Latency Programming (Internship)

Jan – Apr 2019, Vancouver BC

- Optimized camera's performance by over 300%, using C++ for dynamic memory allocation and multithreading.
- Discovered errors missed by the research team for over 6 years; collaborated with multi-disciplinary teams to fix.

ACHIEVEMENTS

1st Place UBC 2020 Software Engineering Competition, **4th Place** Machine Learning Competition, **Honorable Mention** nwHacks 2021 (Western Canada's Largest Hackathon), **UBC Dean's Honour List** (85%+ GPA, 27+ credits, full-time)

TECHNICAL PROJECTS

3D-O (Algorithms, Web Application) – 200+ Users (Personal Project)

Dec 2020 - Apr 2024

- Mission: to combat COVID19 by sharing my creative, lifelong hobby, 3d-origami, to promote social distancing.
- o 3D project-modeling interface via Three.is; Paint-by-pixel interface via React.js, MobX State Tree.

Daily Dash (Mobile Application) – 1st / 28 Teams (Course Project, Team of 4)

Sept – Dec 2020

- Mission: to empower users across all walks of life to achieve their life goals via regular, repeated habits.
- o Dynamic forms via React Native, MobX State Tree; Push notifications, user authentication via Google Firebase.

Machine Learning Robot Competition – 4th / 20 Teams (Course Project, Partnership)

Sept - Dec 2019

- Mission: autonomous navigation via OpenCV; reinforcement learning and image processing in Python.
- o Identified alphanumeric characters with 99% accuracy with a convolutional neural network built with Keras.

TECHNICAL SKILLS

Languages: Go, Python, JavaScript, TypeScript, C, C++, SQL, Java

Technologies: Git, Linux, Node.js, Express.js, MySQL, MongoDB, AWS, Azure, Docker, RocketMQ, ElasticSearch