Leo Liu

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EDUCATION

BSc Computer Science, University of Toronto   Sep 2021 – May 2026
GPA: 3.95/4.0   Dean's List

- **Relevant Courses**: Software Engineering, Data Structures and Algorithms, Computer Networks, Intro to ML, Databases, Computer Architecture, Operating Systems
- **Activities**: President (2023) and Project Lead (2022) at Blueprint, Student Developer (2024) at UofT Dept of CS
- **Interests**: Backend Development, Computer Systems, High Performance Computing

WORK EXPERIENCE

Mozilla – Firefox Privacy   Toronto, ON
Software Engineer Intern   May 2025 – Present

- Delivered an Enhanced Tracking Protection (ETP) customization feature to over 1.5M+ users, giving users the option to mitigate over 1000 site-breaking issues in ETP-Strict mode, while preserving privacy protections
- Led the design and rollout of an interactive infobar, driving high user engagement and adoption through cross-functional collaboration with Messaging Systems and UX teams
- Boosted bug diagnostic efficiency by building a custom developer panel for QA teams, streamlining debugging process

ParaMathics Lab – Compiler for Tiled-Level Sparse Matrix Multiply   Toronto, ON
Undergraduate ML Compiler Researcher   May 2025 – Present

- Contributed to supporting 2:4 sparsity on NVIDIA tensor cores in OpenAI's Triton compiler by developing mixed-sparsity kernels, achieving up to a 30% increase in throughput compared to cuSPARSELt
- Optimized kernels to achieve up to 8% performance gains with autotuned configurations, addressing issues related to L2 cache utilization, tail effects, and load imbalance

Seismic – LiveSocial   Toronto, ON
Software Engineer Intern   Sep 2024 – Dec 2024

- Delivered a highly requested full-stack feature giving admins greater access control over platform-specific content sharing, enhancing customization for over 2,000 client companies
- Transformed a client configuration update process to self-service, reducing configuration update time by 99% by migrating legacy configurations for 9 clients from file-based storage to MongoDB

Konrad   Toronto, ON
Software Development Intern   May 2024 – Aug 2024

- Owned the backend development of an internal employee gaming leaderboard using Express, GraphQL and PostgreSQL, designed and optimized the SQL database schema and implemented several efficient GraphQL resolvers
- Developed a daily data ingestion pipeline that integrates four gaming platform APIs to automatically fetch and aggregate game statistics for over 500 employees, thereby enabling real-time leaderboard functionality

LEADERSHIP

Blueprint, UofT Chapter – Software for Social Good   Toronto, ON
President   Aug 2023 – Apr 2024

- Led 40+ members in delivering pro-bono software solutions to 3 nonprofits, while establishing industry partnerships with Manulife and Guidewire to facilitate internship search events for 100+ students
- Established the Project Lead (PL) Hub and comprehensive the PL Handbook to standardize project management methodologies, client requirement scoping, and team engagement best practices
- Streamlined club operations by implementing structured processes for project evaluation, developer onboarding, and technical documentation, reducing onboarding efforts by 60%

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, C, C++
Frameworks: React, GraphQL, Django, Prisma, Node.js, Express.js
Systems & Tools: Git, Linux/Unix, Phabricator, Slurm, Vim, LLVM/MLIR, Nsight Compute