

LUKA ALADASHVILI

SOFTWARE ENGINEER

✉ luka.aladashvili.work@gmail.com

🌐 [LinkedIn Profile](#)

🔗 [GitHub Profile](#)

💻 [Personal Website](#)

Top 0.01% National **Math Champion** and **ICPC Northern Eurasia Finalist** specializing in high-performance algorithms and **AI infrastructure**. Currently advancing **LLM evaluation** and **RLHF** at **xAI** by engineering strict, system-level programming benchmarks and auditing model-generated codebases. A proactive engineer bridging the gap between complex mathematics and production-ready architecture, with a proven track record of scaling **award-winning startups**, contributing to major **Open Source ecosystems**, and optimizing **low-level execution pipelines**.

WORK EXPERIENCE

- **Software Engineering Specialist** | 2026 - PRESENT
xAI
 - Engineering high-performance algorithms and providing expert-level **RLHF** to train and scale the reasoning capabilities of **xAI's foundational models**.
 - Generating **benchmark solutions** and conducting rigorous code reviews to ensure the AI consistently produces scalable, **production-ready infrastructure code**.
- **Co-founder & Lead Engineer** | 2025 - PRESENT
Fincast (AI-Powered Valuation Platform)
 - Selected for **Startupbootcamp Georgia (Top 20 of 650)** and secured a **50,000 GEL grant**. Leveraged Google for Startups and AWS partnerships to scale cloud infrastructure.
 - Engineered a **high-performance C++** inference engine processing **5,000+ data points/sec** with **<200ms latency**. Optimized the **data pipeline** and **memory layout**.
 - Developed custom **clustering and deterministic validation logic** to mitigate LLM hallucinations, improving valuation accuracy by **30%**.
 - Led engineering team; set up **CI/CD, code reviews**, and **production monitoring**.
- **Open Source Software Engineer** | 2025 - PRESENT
 - Engineered and merged major Pull Requests across **top-tier global open-source organizations**.
 - Earned **renowned contributor status** within the **Zulip ecosystem**, focusing on core backend optimizations,
 - Contributed production-level code to high-profile repositories including **LLVM, Microsoft, HuggingFace**, and **LangChain-AI**.
- **Teaching Assistant - Programming Methodologies & Abstractions** | 2025 - 2026
Free University of Tbilisi
 - Mentoring 40+ undergraduate students in C++ and Java, focusing on **Software Design Patterns** and **Memory Management**.
 - Conducting deep-dive **code reviews** and **optimizing** student implementations for **algorithmic complexity** and **scale**.

EDUCATION

- **FREE UNIVERSITY OF TBILISI**
Mathematics and Computer Science bachelor
GPA: 3.9 / 4.0
Sep 2024 - Present
- **GAIA**
AI Development and Research
Apr 2025 - Present

SKILLS

Core Languages	Engineering
• C++ (High Performance) • C (Systems / Low-level) • Java (Enterprise) • Python (ML/Backend) • Scheme • RISC-V Assembly	• System Design • Docker • CI/CD • GIT • Design Patterns
AI & Performance	
• LLM Evaluation & RLHF • Advanced Prompt Engineering • Bitwise & CPU Optimization • Algorithm Complexity • Memory Management • Valgrind	

TECHNICAL PROJECTS

High-Concurrency Banking Ledger

Architected a thread-safe transaction engine with zero data races (Helgrind verified), utilizing fine-grained locking and custom barriers for ACID consistency.

Pthread Deadlock Detector

Engineered a runtime library that intercepts mutex calls to build a Resource Allocation Graph, detecting deadlocks and circular waits in real-time.

FreeRoom - Real-Time Campus Tracker

FreeRoom is a real-time campus platform showing live room availability, with a calendar builder, lecturer finder, and social networking for students. Built to make campus life easier to navigate, one free room at a time.

ACHIEVEMENTS

- ICPC Northern Eurasia Finalist (High Achievement Award)

Represented Free University in one of the world's most competitive algorithmic regions.

- National Champion (1st Place) - Bank of Georgia STEM Competition

Outperformed **1,000+ participants** in a nationwide STEM competition.

- Top 0.01% nationally

Ranked **4th out of 40,000** students in the Georgian National Mathematics Exams.

- Impel AI Emerging Professional Grant

*Selected for **technical innovation**; awarded a research/development grant for excellence in AI.*

- Grand Prize Winner - International AI in Finance Hackathon

Engineered a winning AI-driven investment matchmaking platform against global competitors.