

George Chkhaidze

CMU Qatar CS '27 | ICPC WF 2025
[Portfolio](#) [GitHub](#)

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Education

Carnegie Mellon University Qatar
Bachelor of Science in Computer Science
2023 – 2027
Selected Coursework: Computer Networks, Cloud Computing,
Distributed Systems, Browser Security, Applied Software
Engineering, Data Structures and Algorithms

Technical Skills

Languages: C++, Java, Python, JavaScript, C
Frameworks: React, Express, Django, FastAPI
Databases: PostgreSQL, MongoDB, Redis
Tools: Docker, Git, Azure, Kafka

Selected Projects

Chess Opening Training Platform

React | Tailwind CSS | Express | chessmaxx.com

- Built and deployed a chess opening trainer with 7,000+ study lines, interactive board, and personalized progress tracking.
- Developed a Express/Postgres backend and React/Vite frontend using Stockfish and Lichess DB for line generation.
- Integrated Chess.com/Lichess APIs for game import and opening-mistake detection; automated CI/CD with GitHub Actions.

FileStack - Distributed File System

Java | TCP Sockets | Dynamic Proxies | Multithreading

- Built a distributed file system with a custom RMI layer, replicated storage nodes, and a global namespace.
- Implemented thread-safe naming/storage services, bidirectional path mapping, duplicate detection, and serialization.

BitTorrent P2P Client with TCP-over-UDP

C | UDP Sockets | Congestion Control | SHA-1

- Built a P2P file sharing client with TCP-like reliability over UDP using sequencing, ACKs, retransmission, and flow control.
- Implemented congestion control, concurrent multi-peer downloads, SHA-1 verification, and flooding-based peer discovery.

Kafka/Samza Stream Processing

Apache Kafka | Apache Samza | YARN

- Built low-latency stream pipelines for GPS and IoT workloads using Kafka and Samza.
- Deployed and debugged distributed jobs on YARN, working with replication, fault handling, and stream monitoring.

Work Experience

- Georgian National Olympiad in Informatics** **2023 Feb - 2023 May**
Problem Setter and Testing Coordinator

Ensured a robust testing environment for three staged contests to select Georgia's national team, conducting tests and creating challenging problems for each round to evaluate participants' skills accurately, with over 300 participants overall.

- European Junior Olympiad in Informatics** **2023 May - 2023 Sep**
Scientific Committee Member

Contributed to the scientific committee for the international competition hosted in Georgia, creating complex problems for 96 participants from 24 European countries and ensuring a rigorous evaluation process for the event.

International Achievements

ICPC WF 2025 - Finalist	Represented CMUQ International Collegiate Programming Contest Finals
QCPC 2024 - 1st Place	Qatar Collegiate Programming Contest
ACPC 2024 - 10th Place	Arab and Africa Championship Semifinals
IOI 2022 - Team Member	International Olympiad in Informatics
APIO 2021 - Bronze Medal	Asia-Pacific Informatics Olympiad
MIA 2019 - 2nd Place	Millennium Innovation Award, STEM Track
Codeforces - GioChkhaidze	Solved 2200+ problems, participated in 190+ contests.