SHAYAN HOSSEINI

📞 604-841-1112 · 🌐 shayanh.com · ✉ seshayanh@gmail.com · 🔗/in/sshayanh · ⭘/shayanh · ✈ Canada

SUMMARY

Software engineer with a focus on distributed systems, holding an MSc in computer science and **5 years of industry experience**. Experienced in building large-scale backend services, led the development of systems serving **500 million requests per day**. Recognized by winning awards in **world-class programming contests**.

EXPERIENCE

Software Systems Researcher at the University of British Columbia   *Jan 2021 - Aug 2023*

· Designed and built a high-performing **distributed key-value store** based on the Raft protocol, achieving a **40% increase in throughput** compared to state-of-the-art verified systems.
· Published my work at ASPLOS, a top-tier systems conference (21% acceptance rate) and was invited to deliver a talk on the topic at leading companies such as AWS and Microsoft.
· Developed open source projects with more than **15,000 downloads** and 300 stars on GitHub.

Research Intern at Microsoft Research Redmond   *Jun 2022 - Sep 2022*

· Created a system that prioritizes the critical faulty datacenter links for the fix using reinforcement learning.
· Demonstrated a 13% reduction in failures of Microsoft Azure's automatic mitigation system for datacenter links.

Staff Software Engineer at Cafe Bazaar   *Jan 2020 - Dec 2020*

· **Led a team of 10 engineers** to make a unified cloud services product from services developed by other teams.
· Designed, implemented, and shipped a billing system automating user charges, resulting in a **20x faster** process.

Senior Software Engineer at Cafe Bazaar   *Jan 2017 - Apr 2019*

· Joined the internal infrastructure team as the **4th member** and played a key role in the team's successful transition into a **public cloud company** with over 50 employees.
· Led a team of 8 engineers to build a CDN service **serving 5% of the entire internet traffic in Iran**.
· Scaled out the capacity of CDN service by 50% through deploying a new architecture utilizing cache servers.

Software Engineer at Cafe Bazaar   *Jul 2015 - Jan 2017*

· Implemented new features on a back-end codebase with ~100,000 lines of Python code and 30 million users.
· Managed the CDN and multiple back-end services across 15+ servers to ensure optimal performance and availability.

EDUCATION

University of British Columbia
M.Sc. in Computer Science

University of Tehran
B.Sc. in Software Engineering

AWARDS AND HONORS

Distinguished Artifact Award in the 28th ASPLOS conference   *Mar 2023*
Awarded to the top 5% of accepted papers, recognizing an outstanding artifact contributing to research and practice.

World Finalist in the 41th **ACM ICPC World Finals**, South Dakota, USA   *May 2017*
Placed top 0.1% among more than 45,000 college students in the most prestigious programming contest in the world.

2nd, 2nd, 3rd place in ACM ICPC West Asia Region Regional Contest, respectively in 2016, 2017, 2018.
Top 1% among more than 300 teams participating in the algorithmic problem solving contest.

Silver Medal in the 24th Iranian National Olympiad in Informatics   *Sep 2014*
Top 0.5% in the algorithmic programming contest among 10,000 participants in the country.

TECHNICAL SKILLS

Languages	Go, Python, C++, Java, TLA+
Frameworks	Django, Flask, ReactJS, Pandas, gRPC
Technologies	Kubernetes, Docker, PostgreSQL, Redis, Nginx, Microsoft Azure, AWS, Git