SHAYAN HOSSEINI

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

SUMMARY

Software engineer with an MSc in computer science and 5 years of industry experience, **3 years as a technical manager**. 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**. Expert in distributed systems, implemented novel systems, and published distributed systems research in top venues.

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, PGo and GoVector, 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   *Jan 2021 - Aug 2023*
M.Sc. in Computer Science

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*
The most prestigious programming contest in the world. Placed top 0.1% among more than 45,000 college students.

3rd, 2nd, 2nd place in ACM ICPC West Asia Region Regional Contest, respectively in 2018, 2017, 2016.
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/C++, Java, Bash, TLA+
Frameworks	Django, Flask, ReactJS, Pandas, gRPC
Technologies	Kubernetes, Docker, PostgreSQL, Redis, Nginx, Microsoft Azure, AWS, Git