

Hamidreza Ramezani-Kebrya

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WORK EXPERIENCE	<p>TELUS Software Engineer Contractor May 2023 - Jan 2024</p> <ul style="list-style-type: none">- Develop and test an SDN mediation layer to translate the vendor proprietary management of network equipment functions and protocols into an open and standard API into the network.- Use Cisco NSO to develop the mediation layer that is mainly made up of service and action packages.- Write automated tests to validate service and action packages. <p>UBC Teaching Assistant (Distributed Systems) Jan 2022 - Dec 2024</p> <ul style="list-style-type: none">- Support students to build a large-scale distributed key-value store on a cloud testbed.- The Key-value server is supposed to meet different criteria like Sequential Consistency, At-Most-Once Semantic, Fault Tolerance, Scalability, Performance, and Availability. <p>IST Austria Research Intern Aug 2020 - Aug 2021</p> <ul style="list-style-type: none">- Add quantization scheme into NVIDIA Collective Communication Library.- Have 2x speed-up without losing significant accuracy.- Have 20% speed-up in training transformers when pytorch uses QNCCL as the communication backend. <p>EPFL Research Intern Jun 2019 - Aug 2020</p>
EDUCATION	<p>M.A.Sc. in Computer Engineering Jan 2022 - Nov 2024 <i>University of British Columbia</i></p> <p>B.Sc. in Computer Engineering Sep 2014 - Oct 2019 <i>Amirkabir University of Technology</i></p>
PUBLICATIONS	<p>Hamidreza Ramezanikebrya, and Matei Ripeanu. (re)Assessing PiM Effectiveness for Sequence Alignment. In <i>Euro-Par'24</i> **Best Paper Award Nominee**.</p> <p>Ilia Markov, Hamidreza Ramezanikebrya, and Dan Alistarh. CGX: Adaptive System Support for Communication-Efficient Deep Learning. In <i>Middleware'22</i> **Best Paper Award Runner-up**.</p>
TECHNICAL SKILLS	<p>Programming and scripting: Java, Scala, C, C++, Cuda, Python, Bash, Tcl</p> <p>HPC: Roofline, Intel Advisor, Perf, RAPL, Likwid, OpenMP, PThreads</p> <p>Tools, IDEs, and Debuggers: Git, Gdb, Vim, JetBrains, VS Code</p> <p>Data analysis: Numpy, Pandas, Matplotlib, Jupyter, SQL</p> <p>Operating Systems: Windows, Linux</p> <p>Other: L^AT_EX, Web development, Docker, Cisco NSO, Postman, Yang, CICD, Kubernetes, GKE, GCP, AWS, Helm, Terraform, Packer, XML, JSON, Protobuf</p>