Hamidreza Ramezani-Kebrya

CONTACT
INFORMATION

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WORK
EXPERIENCE

TELUS   **May 2023 to Dec 2023**

Network engineer

Project: Microtemplates: mediation mapping of data models

- An SDN mediation layer is used 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.

Institute of Science and Technology Austria   **Aug 2020 to Aug 2021**

Research intern

Project: QNCCL: Quantized NVIDIA Collective Communication Library

- 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.

Ecole Polytechnique Federale de Lausanne (EPFL) June 2019 to Aug 2020

Research intern

DEGREES

University of British Columbia, Vancouver, Canada   **January 2022 to now**

M.A.Sc., Computer Engineering **GPA: 87.8/100**

Amirkabir University of Technology   **Sep 2014 to Oct 2019**

B.Sc., Computer Engineering **GPA: 18.48/20**

PUBLICATIONS

Hamidreza Ramezanikebrya, and Matei Ripeanu. (re)Assessing PiM Effectiveness for Sequence Alignment. In 30th International European Conference on Parallel and Distributed Computing (Euro-Par'24), August 26–30, 2024 ***Best paper award nominee***.

Ilia Markov, **Hamidreza Ramezanikebrya**, and Dan Alistarh. CGX: Adaptive System Support for Communication-Efficient Deep Learning. In 23rd International Middleware Conference (Middleware'22), November 7–11, 2022 ***Best paper award runner-up***.

TECHNICAL SKILLS **Programming and scripting Languages:**
Java, Scala, C, Cuda, Python, Bash, Expect, Tcl, Lux.

HPC tools and models:

Roofline, Intel Advisor, Perf, RAPL, Likwid, OpenMP, PThreads.

Tools and IDEs:

Git, Gdb, Cuda-gdb, Vim, JetBrains developer tools, NetBeans, Eclipse.

Other:

LaTeX, Web development, Docker, Cisco NSO, Postman, Yang, CICD, Kubernetes, GKE, GCP, AWS, Helm, Terraform, Packer.