

# Hamidreza Ramezani-Kebrya

---

## CONTACT INFORMATION

*Mobile:* +1-2368668422  
*E-mail:* [hamid@ece.ubc.ca](mailto:hamid@ece.ubc.ca)

## WORK EXPERIENCE

### TELUS

May 2023 - Jan 2024

#### Software Engineer Intern

Project: Microtemplates: mediation mapping of data models

- 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.

### University of British Columbia

Jan 2022 - Present

#### Teaching Assistant

Course: Distributed Systems

- Support students to build a large-scale distributed key-value store on a cloud testbed.
- Assist them in gaining hands-on experience with industry-standard tools, technologies, and platforms like Git version control, Google Protocol Buffers, and Amazon Elastic Cloud Compute (EC2).

### Institute of Science and Technology Austria

Aug 2020 - 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 - Aug 2020

#### Research Intern

## DEGREES

### University of British Columbia, Vancouver, Canada

Jan 2022 - Dec 2024

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

### Amirkabir University of Technology

Sep 2014 - 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:**

L<sup>A</sup>T<sub>E</sub>X, Web development, Docker, Cisco NSO, Postman, Yang, CICD, Kubernetes, GKE, GCP, AWS, Helm, Terraform, Packer.