

Open Postdoc position, starting data January 1, 2021, salary 90,000 CAD/year:

## **Parallel and Communication Efficient Algorithms For Large-Scale Graph-Based Machine Learning**

OpAL Lab, David R. Cheriton School of Computer Science, University of Waterloo

We are looking for a postdoctoral research associate for our research group at the University of Waterloo. Our goal is to develop parallel and communication efficient algorithms for large-scale graph-based machine learning. Example algorithms and applications include but not limited to: optimization algorithms for local graph clustering and optimization algorithms for training graph neural networks for node classification, link-prediction, community detection, graph classification and graph generation. The successful candidate will also collaborate with the Waterloo-Huawei Joint Innovation Lab and Assistant Professor Semih Salihoglu with the end goal to develop a new system or support existing systems on graph-based machine learning. The candidate will also be part of the Scientific Computation Group and the Waterloo Artificial Intelligence Institute.

**Preferred education:** PhD in one of the following or other relevant subjects: numerical optimization, scientific computing, parallel computing.

**Preferred experience:** Experience in implementation of numerical methods in shared/distributed memory computers and GPUs.

### **Additional information**

- Location: We are located at the University of Waterloo, a vibrant technological hub with Concept, Velocity and Google around the block. More information about Waterloo here, although it's best if information about the region are communicated face-to-face by talking to members of our group or other residents of Waterloo.
- Timeline: We start reviewing applications immediately and until the position is filled (we'll mention this on [opallab.ml](http://opallab.ml)). The position is initially one year, and will be extended if both parties are satisfied.
- Application: If you are interested in working with us as a postdoc, please send me an email. State briefly why you are interested and attach a CV. Important: please insert "Application Postdoc" in the subject line. If you are applying to a specific advertisement, note this in your email.

