Postdoctoral Researcher Position in Machine Learning for Networking

We are inviting applications for a postdoctoral position in machine learning for networking in the PINet Lab (https://pinedalhousie.github.io/) at Dalhousie University. Our project, NetRepAIr, is a collaboration between the PINet Lab and Ericsson and aims to automatically repair networking issues (e.g., misconfigurations) using cutting-edge machine learning techniques (e.g., deep reinforcement learning and graph neural networks).

Job summary

The successful applicant will work directly under the supervision of Dr. Israat Haque (https://web.cs.dal.ca/~israat/) and will be part of a vibrant team developing cutting-edge solutions for the most challenging networking problems. The position will involve introducing new machine learning techniques to transform graph representations of networking data (e.g., BGP, OpenFlow, and P4 configurations) and evaluating these techniques in real-world network deployments. Applicants are expected to collaborate with and mentor Ph.D. and MSc students and publish papers in top-tier ML and Networking venues. They are also welcome to get involved and contribute to other ongoing projects in the lab.

Requirements

- Ph.D. in computer science, data science, machine learning, or a closely related field
- Strong research background in networking, deep learning, or reinforcement learning
- Excellent written and oral communication skills
- Experience with Python (pytorch/tensorflow) is preferred

How to apply

To be considered for this position, please submit your CV, a 1-page research statement, and contact information of 3 referees to israat@dal.ca. The same email can also be used for further details on this opportunity.

For full consideration, please apply by June 30, 2021. We will start conducting online interviews soon after the deadline and will continue until the position is filled.

About the PINet Lab

The Programmable and Intelligent Networking (PINet) Lab is a research lab in the Faculty of Computer Science at Dalhousie University, led by Prof. Israat Haque. We desire to innovate and create social impact through high-quality work. The lab research projects explore the benefits of cutting-edge networking programmability (e.g., software-defined networking and network function virtualization) and AI/ML algorithms to solve various practical networking issues, with a special focus on performance, reliability, and security aspects. PINet lab currently hosts 15
students from nine different countries. We commit to foster diversity and always welcome highly motivated top students from all over the world.

About Dalhousie and Faculty of Computer Science

Dalhousie University (https://www.dal.ca) is one of Canada’s U15 group of research-intensive universities. Active researchers have many opportunities for both investigator-led operating grants and support for industry collaboration. The Faculty of Computer Science (https://www.dal.ca/faculty/computerscience) is a research-focused faculty with over 40 faculty members, including Tier I and Tier II Canadian Research Chairs. We are a fast-growing faculty in the university, with approximately 1400 students, one-third of whom are graduate students at the Master’s or Doctoral level. The Faculty hosts the Dalhousie Institute for Big Data Analytics, which has academic and industry partnerships centered on deep learning and artificial intelligence.

About Halifax

Dalhousie is located in Halifax, Nova Scotia, Canada (http://www.discoverhalifaxns.com). Halifax is the largest city in Atlantic Canada and is a vibrant and multicultural spot that welcomes many newcomers. It is also a regional tech hub and affords residents a high quality of life. The city offers a wide variety of restaurants, parks, playgrounds, watersports in the summer, snow sports in the winter, a vast number of arts and cultural events, an excellent library system, and a passable public transit system. Nova Scotia is home to many beautiful communities, campgrounds, trails, lakes, rivers, beaches, lighthouses, and opportunities for running, hiking, cycling, ATVing, boating, and generally exploring the great outdoors. Located in one of Canada’s more temperate areas, Nova Scotia gets warm, sunny summers, long, colorful autumns, and cool, snowy winters.