Openings of Co-op Master Students in Big Data and Cloud

Communications Research Centre, Ottawa

Workplace

The Communications Research Centre Canada (CRC) is the federal government's primary laboratory for research and development (R&D) in wireless communications. It performs R&D that advances the efficient exploitation of the radio spectrum and serves as the federal government's leading source of scientific knowledge and long-term technical advice, primarily to support the development of public policy and services for Innovation, Science and Economic Development Canada. The CRC is located in Ottawa, Ontario. More details can be found at: http://www.crc.gc.ca/

Positions

The CRC has openings for co-op Master students in big data and cloud. The candidates in these positions will conduct R&D in data analytics and cloud computing for wireless communications and radio spectrum management. The R&D tasks for the positions in big data include understanding project requirements in terms of data science and developing algorithms and software for cleaning, analyzing, and visualizing data. The tasks for the positions in cloud computing include migrating existing applications to the cloud and developing new applications related to wireless communications and radio spectrum management.

The positions of co-op Master students will be filled for the period from the beginning of May 2019 to the end of August 2019 with the possibility of extension from September 2019 to December 2019. The selection of candidates will be based on the qualifications listed below.

Citizenship

The candidates must be Canadian citizens.

Education

The candidates must be students in a Master program in the field of computer science, computer engineering, or related fields with a specialization in big data or cloud.

Knowledge for the positions in big data

Knowledge in machine learning and statistics to solve practical problems. Specifically, the knowledge includes classifications, clustering, time-series analysis, regression, and anomaly detection.

Knowledge in developing algorithms and software that detect patterns in multi-dimensional data, build predictive models, and visualize big data using tools such as Power BI.

Knowledge in computer languages such as R, Python, and related the Integrated Development Environments (IDEs).

Knowledge in the use of Spark or Hadoop.

Experience in any of the above knowledge areas would be an asset.

Knowledge for positions in cloud computing

Knowledge in cloud architecture and designing applications for the cloud, more specifically,

- Knowledge in using cloud-based services to store, analyze, and visualize big data.

- Knowledge in optimizing cluster-based data processing (ex: Hadoop, Spark) and storage services like relational databases and object storage databases (ex: data modeling and indexing)

- Knowledge in developing web applications and Web Services.

- Knowledge in OpenStack, AWS, Azure, Google Cloud, VMware, and other cloud-related systems, tools, and services, also with multiple programming languages, such as SQL, Java, C#, R, Python, and PHP.

Skills and experience for all positions

Experience in writing scientific articles and making technical presentations.

Be creative and able to generate new ideas, effective interpersonal relationships and teamwork, and self-motivated and reliable.

Contact

Anyone interested in these positions must send his/her resume and a cover letter to Valerie Maier through email: valerie.maier@canada.ca.

Salary Information

For co-op students: http://www.tbs-sct.gc.ca/psm-fpfm/pay-remuneration/rates-taux/student-etudiants-eng.asp
For post-doc: http://www.nserc-crsng.gc.ca/Students-Etudiants/PD-NP/PDF-BP_eng.asp