



Machine/Computer Vision Scientist/Engineer

At C-CORE, we are committed to investing in people and creating a dynamic and rewarding employment experience. C-CORE is seeking a **Machine/Computer Vision Scientist/Engineer** to work with its highly skilled team of business professionals, engineers and scientists. If you are a self-motivated team player and committed to excellence, this may be your opportunity.

C-CORE conducts R&D and provides research-based advisory services, delivering innovative engineering and technology solutions to national and international clients. Over the past 43 years, we have built a world-class team of over 70 dedicated professionals, with a reputation for excellence in Remote Sensing, Ice Engineering, and Geotechnical Engineering. This position is located in our St. John's office.

MACHINE/COMPUTER VISION SCIENTIST/ENGINEER

C-CORE is looking for a visionary in machine learning to help develop and implement its strategy in remote sensing products and services. If you are that person, you will understand the state of the art in machine learning and deep learning, and have a solid basis in industrial computer vision, particularly related to earth observation and geospatial data. You will already be well versed in the various flavours of artificial neural networks and motivated to analyse and implement classifiers for remotely sensed data, such as electro-optical imagery, synthetic aperture radar, photogrammetry and/or Lidar. You will already have implemented code for developing convolutional neural networks applied to various machine-learning problems that relate to geospatial or image-based data.

You have deep experience using Python, C++ and varied open source packages to build serious cloud computing pipelines. We ingest many kinds of geospatial data and then we dice, slice, stretch, rotate, and combine them. We use deep learning to turn the pixels into numbers. We model, aggregate, transform the numbers into meaningful insights. This entire pipeline is formulated, created, monitored, and managed by you. Experience working at scale is exceptionally important.

To visualize the Earth and all of its rich features, over 500 million images would be needed for 1 meter pixel resolution. We need you to be challenged by such a problem, and have the skills to solve how to formulate practical solutions.

Job Duties

- Define algorithms for image ingestion, re-projection, tiling, normalization, spatial intersection, and other initial processing
- Maintain and process large amounts of geospatial data; write code for automating complex geospatial requests
- Build and maintain production pipelines for ingesting images from satellite/UAV operators and processing them in the cloud at scale
- Work with machine vision and data science teams to define and implement algorithms for multispectral image analysis, machine vision, and data analysis
- Work with front end team to serve the results up to our users

Skills & Qualifications

- Bachelor's, Masters or PhD. Degree in Engineering, Computer Science or related discipline
- 3+ years experience with Python, C++ or other similar language
- Experience with industrial machine vision and computer vision programming (e.g., OpenCV)
- Knowledge of GDAL or Postgis a major plus
- Experience with large-scale analysis of satellite imagery a major plus

Location:

St. John's, Newfoundland

Salary & Benefits:

C-CORE is committed to investing in people and creating a dynamic, rewarding employment experience.

C-CORE offers competitive salaries and benefits, including attractive vacation & leave entitlements, a generous retirement savings plan and medical & dental plans. We also offer numerous opportunities for professional and personal growth.

Apply to:

Qualified applicants should forward their résumé electronically to: careers@c-core.ca. Please quote **Machine/Computer Vision Scientist/Engineer** in your application. For further information, please refer to C-CORE website (www.c-core.ca).

Deadline for Submission:

October 4, 2018

C-CORE thanks all those who apply; however, only those whose skills most closely match the position will be contacted.