

Two-year Postdoc position

The Department of Mathematics and Statistics at University of Victoria invites applications for a recently funded Post-Doc position on “Learning from big historical geospatial data on the environmental impact to shellfish industry for predictive models and monitoring toolkits.”

Project Aim:

The research will be conducted under the supervision of Dr. Xuekui Zhang and will include interactions with collaborators at multiple government agencies, including National Research Council Canada (NRC), Environment and Climate Change Canada (ECCC), Canadian Food Inspection Agency (CFIA), and Fisheries and Oceans Canada (DFO). The expertise in the team includes Statistics, Data Science, Environmental Science, Ocean Science. The successful candidate is required to develop new generalizable statistical machine learning tools using multivariate functional data to

1. make sense of big historical data, extract useful information;
2. generate a toolkit for visualizing historical and geospatial contamination patterns and predictive models for future contamination levels across Canada.

In doing so, the successful candidate will work with a rich data database, which consists of spatial-temporal ocean contamination data collected from tens of thousands of sites across Canada in the past 40 years. Opportunities are available for professional development in grant writing, scientific communication, mentorship and leadership.

We seek for candidates possessing:

- Sound knowledge of statistical methods
- Experience with machine learning from high-dimensional data and/or multivariate functional data
- Experience with spatial-temporal statistical model
- Experience with model scripting/programming (R language is preferred)
- Basic knowledge of GIS tools and techniques
- Excellent communication and writing skills in English
- Highly motivated in publication related to data science, environmental and ocean science

In addition, Knowledge of environmental and ocean sciences will be an asset.

Candidates recently obtained a Ph.D. in, Statistics, Computer Science, Earth and Ocean Sciences, Environmental Sciences, Physical Geography and Geological or Environmental Engineering are encouraged to apply.

Applications should include:

1. a cover letter with detailed explanations on how the applicant meets the requirements for the position,
2. a curriculum vita,
3. academic transcripts, and
4. the names and contact information of three professional references.

Application materials should be combined into a single PDF document and be sent to Xuekui@UVic.ca, by Monday March 1, 2021 or until the position is filled.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.