POSTDOCTORAL JOB OPPORTUNITY

Postdoctoral Fellow Faculty of Computer Science

POSITION SUMMARY:

Applications are invited for a Postdoctoral Research Fellow within the Faculty of Computer Science at Dalhousie University in the research area of deep learning for fish detection and classification, under the appointment of Professor Chris Whidden. While all applicants with a background in machine learning or deep learning will be considered, candidates with prior experience in underwater video or acoustic analysis will be given special attention.

The successful candidate will engage closely with DeepSense and Innovasea Marine Systems Canada Inc as part of the Ocean Aware Ocean Supercluster project. Innovasea is developing an integrated multi-sensor platform for monitoring at-risk fish which cannot be surgically tagged. This effort requires robust accurate methods to detect fish and classify them by species. The postdoctoral research fellow will lead research efforts to develop and test methods for these problems that can work with multiple types and sources of data. The fellow will have the opportunity to mentor and work with a Master of Computer Science student on this project. This project is funded by the Mitacs Accelerate program.

The anticipated starting date is May 1, 2021, with the possibility of an earlier start date. The initial appointment will be for one year, with potential renewal if funding is available. While the fellow will ultimately be expected to move to Nova Scotia, there is the possibility that the current global public health crisis makes moving to Canada effectively impossible until after the start of employment so the position can begin remotely.

Review of applications will begin immediately and will continue until the position is filled. Applicants must submit the following material via email: 1) cover letter; 2) curriculum vitae, 3) a short research statement detailing the applicant's scientific interests, accomplishments and future research strategies, and 4) list of references.

Dalhousie University is a member of the U15 group, Canada's leading research-oriented universities. Dalhousie is located in Halifax, Nova Scotia, a city known for its excellent quality of life, being the most vibrant and populated in the Canadian Maritimes, as well as a major economic center in the Atlantic Canada.

DeepSense unites the next generation of AI and machine learning experts with companies that want to harness the potential of data and lead the smarter ocean economy.

What we offer

- Funding to pursue research ideas and a possibility to conduct research in a new research group at a leading university that creates knowledge and expertise for a sustainable future. The funding includes salary costs for 1 year for each employed postdoc fellow.

- A network of colleagues and peers with high ambitions in an open, curious, and dynamic environment.

- An international workplace and environment.

Requirements and Qualifications:

PhD in Computer Science or a related discipline

Dalhousie University is committed to fostering a collegial culture grounded in diversity and inclusiveness. The university encourages applications from Aboriginal people, persons with a disability, racially visible persons, women, persons of minority sexual orientations and gender identities, and all candidates who would contribute to the diversity of our community. For more information, please visit <u>www.dal.ca/respect</u>.

- A background in machine learning or deep learning
- Evidence of research excellence such as publications
- Experience with underwater video or acoustic analysis is preferred but not necessary

Salary Range: \$45,000 CAD per year

Start Date: The anticipated start date is May 1 but this is flexible and can be earlier **Duration of appointment: 1 year with a possibility for a second if funding is available**

Deadline for application: Review of applications will begin immediately and continue until the position is filled

Interested parties should forward a cover letter, current CV, research statement, sample publications (or links to sample publications) and contact information of 2-3 references to:

Dr. Chris Whidden <u>cwhidden@dal.ca</u>

Please use the subject line "MITACS INNOVASEA PDF FELLOWSHIP APPLICATION".

We thank all applicants, however, only candidates selected for an interview will be contacted.