To Whom It May Concern

Title: Research Analyst I – Computer Vision / Deep Learning

Location: Downtown Toronto, ON, Canada

Start Date: As early as February 2020

Duration: 6-8 months

Salary: $24.04 per hour (plus benefits)

Closing Date: Until the position is filled

Position Type: Temporary Full-time


The AIRR invites applications for the position of Research Analyst to work on a research project to detect incidences of agitation and aggression from the videos recorded from people living with dementia. The goal of this project is to employ computer vision techniques and develop deep learning based approached to detect episodes of agitation from this unique multi-camera spatio-temporal data. This exciting project provides excellent opportunities to hone ones skills in solving real-world problems with high impact.

This position will require involvement in activities ranging from implementing existing and new deep learning algorithms, data management and storage on high-end cluster, retrieving data from cold storage, extracting relevant segments of videos from larger videos for analysis, big data analysis, and predictive modeling. This position will involve collaboration with our multi-disciplinary team comprising of computer scientists, biomedical engineers, clinician scientists, and research manager.

The selected candidate is expected to translate the research performed in this project in top quality academic publication(s) and present at relevant conferences.

The successful candidate will be co-supervised by:

- Dr. Shehroz Khan, Scientist, KITE-TRI, and Assistant Professor (Status), IBBME, University of Toronto, and

- Dr. Andrea Iaboni (Geriatric Psychiatrist), Affiliate Scientist, KITE-TRI, and Assistant Professor, Department of Psychiatry, University of Toronto.

Requirements:

We are seeking highly motivated candidate with the following qualifications:

- Must hold a Bachelors with 1 year experience or Masters in Computer Science / Computer Engineering or related area. PhD candidates who have completed their course work requirement may also apply.
- Advanced knowledge in Computer Vision, Deep Learning, Anomaly Detection, Autoencoders, and Convolution Neural Networks.
- Hands on experience in Python, Tensorflow / Pytorch (preferable), Keras, scikit-learn libraries.
- Previous experience in working on video data, high-end cluster computing. A link to Github will be good to have in the application.
- Prior publication record in top quality journals/conferences will be given high priority.
- Possess excellent communication skills and demonstrate strong leadership skills.
- Possess excellent time management skills and multi-tasking abilities.

KITE – Toronto Rehab, UHN hires based on merit and is committed to employment equity. All qualified persons are encouraged to apply. However, due to the short-term nature of the project, Canadian citizens and permanent residents will only be considered for this position, as we could not sponsor work-permits for this short term job.

Application:
Applications will be accepted until the position is filled. To apply, please send a one page covering letter highlighting the relevance of your skills, knowledge and experience to the above mentioned position, 2 page (maximum) resume, including full publication list, country of citizenship and date of availability, a copy of your university transcripts and email to Shehroz.khan@uhn.ca with the subject line “Research Analyst - AIRR”

Only selected applicants will be contacted for interview. Selected applicants will also be asked to forward two academic and/or professional letters of reference.

Shehroz Khan
Scientist,
Artificial Intelligence and Rehab Robotics Lab,
KITE | Toronto Rehab | University Health Network

Assistant Professor (Status),
Institute of Biomaterials & Biomedical Engineering (IBBME),
University of Toronto
http://individual.utoronto.ca/shehroz/

A Healthier World: Find out how UHN is delivering on our vision here.

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