PHD POSITIONS IN COMPUTATIONAL PSYCHIATRY

The PhD program in the Department of Psychiatry at the University of Alberta has two openings for PhD students to conduct research in computational psychiatry, applying machine learning to multimodal datasets for mental disorders. Current and potential projects include diagnosis and treatment outcome predictions with machine learning including deep learning, identification of clinical, cognitive and biological markers, brain structural and functional mechanisms of mental disorders and brain and cognitive aging in populations with mental disorders. The successful candidates will possess a relevant undergraduate degree in biomedical engineering, computer science, mathematics neuroscience, physics, psychology and statistics, and have strong interest in research of mental disorders and brain science. Some experience of coding with Python, Matlab, R or C, or experience in neuroimaging, clinical, genetic or health record data processing is required. The successful applicant will be an effective team-player with excellent communication (oral and writing) skills.

In this context, students will have supervised access to several public and government/institution/company owned datasets, including health records, clinical trials, brain imaging, and genetic datasets of up to millions of cases from Alberta and the rest of Canada, USA, China and India. In this research group students have the opportunity to be co-supervised and collaborate with several PIs in psychiatry and computer science. The successful applicant will join several research projects in computational psychiatry, gain mentorship in writing research grant proposals and preparation of grant reports for funding agencies and preparation of articles for publication in peer reviewed journals.

The minimum starting stipend for this position is $25,000 per annum and will be commensurate with experience of the successful applicant.

To Apply:

Candidates should submit a cover letter, a statement of career goals, research interests and vision for research track if applicable, including a description of research interests; a complete CV (Canadian Common CV is acceptable) including a summary of graduate thesis research and post-doctoral research (if applicable), transcripts, and the names and contact information (address, phone number and email address of three referees to:

Contact Name: Dr. Bo Cao
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Email address: bcao2@ualberta.ca
Webpage: https://cychiatry.github.io & https://www.ualberta.ca/medicine/about/people/Bo-Cao

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.