

Principal Investigator: Dr. Subha Kalyaanamoorthy, Department of Chemistry, University of Waterloo, Waterloo, Ontario, Canada.

Project: Machine learning/deep learning model development for biomolecular data analyses and prediction

Research Area: Data science and Computational chemistry

Pre-requisite: A Ph.D. in relevant field within the last 5 years or soon to be completed.

Description: We are looking for a self-motivated researcher with expertise in machine/deep learning methods for biochemical applications to work in a multi-disciplinary team. The applicant will work with a team of biochemists, computational chemists, and pharmacologists and contribute to synthetic biology and drug discovery projects in the team. This is a 1-year contract position with a possibility for extension upon satisfactory performance and mutual agreement.

We value diversity and equal opportunity in our team and welcome applications from all relevant qualified candidates.

Required Skills:

- (1) Demonstrated experience in building machine learning/deep learning models using one or more large scientific data sets involving sequence, protein structures, molecular properties, and pathological images.
- (2) Strong knowledge and experience in data science algorithms, methods, and analysis techniques.
- (3) Experience in programming using Python and R languages and working with high-performance computing clusters.
- (4) Experience in using different libraries such as RDKit, DeepChem, Scikit, and Numpy.
- (5) Experience working in bioinformatics techniques including phylogenetics, protein structure, dynamic trajectory data, and/or small molecule/chemical structures would be desirable.
- (6) Demonstrated ability to work independently and in a team environment, contribute in multiple projects and meet deadlines. Must have good project management skills.
- (7) Possess excellent oral and written communication skills

Interested candidates, please email your CV with complete list of publications, PDF copies of two best papers from your publications relevant to the position and contact information of three referees who can comment on the technical skills. The candidate is recommended to provide a link to a GitHub page to demonstrate their contributions to relevant AI/ML projects and python programming.

Applications will be reviewed starting August 25, 2022.

For questions regarding this position, please reach out to Dr. Subha Kalyaanamoorthy (subhak@uwaterloo.ca)