== CLEAN@NRC ==

Our group (http://clean.energyscience.ca) seeks a postdoctoral fellow for a project linking deep neural networks with electronic structure theory. So far, we have shown that deep networks can be used to solve the Schrodinger Equation (https://journals.aps.org/pra/abstract/10.1103/PhysRevA.96.042113), classical spin models (https://arxiv.org/abs/1706.09779, *accepted* Phys. Rev. E), and 2d-materials such as graphene and boron-nitride (https://arxiv.org/abs/1706.09496, *accepted* Comp. Mat. Sci)

The project will explore the use of our recently reported extensive deep neural networks (https://arxiv.org/abs/1708.06686, under review) to the electronic structure problem within the density functional theory. The objective is to show that EDNN can outperform "traditional" electronic structure methods by a factor of 1,000,000. We will generate predictive results 1000 times faster than is currently possible and work on problems 1000 times larger than can currently be modelled.

Salary = $65,000 CAD / year for two years + relocation allowance + conference travel allowance

Location = Ottawa, Ontario, Canada

Coffee = free

Candidates should have obtained a PhD (or equivalent) within the past three years (PhD received on or after July 1, 2015) or expect to complete their PhD by September, 2018. To be eligible, a candidate will be required to submit their CV, three publications, a statement of interest, and send the names of three references with contact information.

Contact isaac.tamblyn@nrc.ca

Application deadline = 31 March 2018

Ad URL: http://clean.energyscience.ca/positions/pdf