**Postdoctoral fellowship combining OR/ML in High-Frequency Limit Order Trading**

As part of a research project funded by IVADO (Institute for Data Valorization), a postdoctoral fellowship at the Finance Department at HEC Montréal and CIRRELT is offered under the supervision of Gunnar Grass (HEC Montréal), Tolga Cenesizoglu (HEC Montréal) and Sanjay Dominik Jena (ESG UQAM, CIRRELT & CERC).

The project is centered on high-frequency limit order book data. The objective is to improve our understanding of the dynamics of limit order trading. Among others, this can help investors to increase trading profits by reducing their market impact and trading costs and predicting stock returns.

Candidates for any of these positions are expected to carry out top-level research, and should have a background in Machine Learning, Operations Research, Artificial Intelligence, Computer Science, Quantitative Finance, or a related field. Fluency, or at least a willingness to learn about mathematical programming and modern machine learning would be ideal. All candidates should demonstrate good programming (e.g. Matlab, SAS, R, Python) and mathematical skills. Experience with large datasets, parallel computing and cloud computing are an asset.

To apply, please send your application package (recent CV with list of publications, name of two references, recent grade records) to sanjay.jena@cirrelt.ca, clearly indicating your possible/preferred starting dates.

Finance Department at HEC Montréal:
https://www.hec.ca/en/finance/

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