Postdoctoral Fellowships and Funded Graduate Student Positions in Algorithms and Systems Engineering for High-Performance Visual Text Analytics

Applications are invited for multiple postdoctoral fellowships and funded graduate student positions (doctoral and Master's) in Algorithm Engineering and Parallel Computing (High-Performance Computing) under the supervision of Dr. Norbert Zeh and Dr. Andrew Rau-Chaplin at Dalhousie University's Faculty of Computer Science. These positions are part of the research project *Algorithm and Systems Engineering for High-Performance Visual Text Analytics on Big Data*, which aims to apply algorithm engineering techniques, parallel computing, and cloud technologies to develop algorithms for fundamental tasks in Text Analytics—such as computing phrase and document similarities, document clustering, and keyword extraction—that scale to very large document collections. The focus on *Visual* Text Analytics as the main application area implies that at least some of these problems need to be solved in almost real time using appropriate data structures, to allow the interactive exploration of the data.

Candidates with one or more of the following research interests are encouraged to apply:

- Algorithm Engineering
- High-Performance Computing, including multicore and GPU parallelism and cloud technologies
- Performance issues in Machine Learning

Successful candidates for the postdoctoral positions will hold a recent Ph.D. in Computer Science or a related field. They will have strong algorithm design, implementation, and evaluation skills and are expected to build expertise in both high-performance computing techniques and relevant machine learning techniques as part of the project. Successful candidates for these positions are expected to participate in the supervision of graduate students.

Successful applicants for the graduate student positions hold a Master's or undergraduate degree in Computer Science or a related field and should have a strong interest in the design, implementation, and evaluation of algorithms.

Applicants should send a full Curriculum Vitae, letters from two referees, and a cover letter highlighting their prior achievements, expertise, and research interests. Applicants for the graduate student positions should also include a copy of their transcript. Electronic submissions are encouraged. Applicants are strongly encouraged to contact Dr. Zeh as early as possible to express interest and to ask any questions they may have about the positions or the project in general. Applications will be considered until the positions are filled.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Dalhousie University is an Employment Equity/Affirmative Action employer. The University encourages applications from qualified Aboriginal people, persons with a disability, racially visible persons and women.

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