



# Post-Doc Positions in Optimization and Mathematical Modelling

Centre for Optimization and Decision Science (CODS) of Thompson Rivers University has one Post-Doc position available for its industrial research projects sponsored by NSERC and industrial partners. The expected starting date is in July 1, 2015 and the initial contract is 12 months, with possible extension to 24 months.

### **Position Description:**

CODS is seeking talented individual who has a Ph. D. degree, with solid theoretical backgrounds and interested in applying their knowledge to improve the efficiency of industrial operations, to conduct impact assessment to the adoption of new technology or policy and to develop strategies to reduce the impact to environment.

## **Required Qualifications:**

- Academic credentials: Ph.D. degree.
- Expertise should include one or more areas of Operations Research, Statistics, Optimization,
  Mathematical Modelling and Industrial Engineering. The past industrial experience is a valuable assess.
- Other desired expertise includes algorithm designs, mathematical programming, discrete optimization, energy conservation, and mineral mining.
- Experience of using statistics and optimization software packages, for example, R, SAS, ILOG Cplex, LINGO or Matlab.
- Excellent in critical thinking, analysis of data, and problem solving.
- Excellent communication skill.
- Ability to work in a team environment and industrial setting.
- Self-motivated, proactive, flexible and passionate about learning.

Centre of Optimization and Decision Science (http://www.tru.ca/science/research/cods.html) is a research centre at Thompson Rivers University, which commits to expand the boundaries of knowledge of optimization and decision-making through interdisciplinary research, development, and innovation of quantitative approaches to complex systems.

Located in Kamloops, BC, just a four-hour drive east of Vancouver, Thompson Rivers University's (http://www.tru.ca) is one of Canada's most beautiful university settings.

The first round of selection starts on **June 1, 2015**, and will continue to accept applications until the position is filled. Interested applicants should send a cover letter, CV, the names and full contact information for three (3) references, along with copies of graduate transcripts to

Prof. Roger Yu

Centre for Optimization and Decision Science (CODS)

Thompson Rivers University, 900 McGill Rd., Kamloops, BC, Canada, V2C 0C8

Email: yu@tru.ca

## **Duties:**

- Carry out independent research in Mathematics.
- Design and develop the research plans to achieve research goal or objectives in academic research programs or industrial projects.
- Analyze and evaluate data, utilizing specialized techniques.
- Manuscript writing for publications in scientific journals or reports.
- Attend and present at conferences and seminars.
- Help to coordinate research projects and oversight/supervision of junior researchers (undergraduate and graduate students), visiting scholars.
- Provide training and guidance to junior researchers in various research methods and techniques.
- Other duties as assigned.

Note: Teaching is not an assigned duty for a Postdoctoral Associate. However if teaching experience is desired, the Postdoc may engage in teaching if teaching is either in their original job description or was recently added to their job description. Teaching any additional courses per semester will be compensated as extra service.

# Job description:

Responsibilities of a Post-doc Fellow include the following:

- Design appropriate methods for data collection and supervise the process of collection, and analyze data.
- Monitor the progress of the projects and manage the miles stones and deadline
- Monitor project budget when asked by PI.
- Prepare materials for submission to granting agencies and industrial partner.
- Maintain accurate records of research project (e.g., a log file).
- Manage and respond to project related email.
- Request or acquire equipment or supplies necessary for the project.
- Supervise junior researchers working on the research project (maintaining records on assignment completion, acting as liaison/mediator between the junior researchers and the PI).
- Attend project meetings.
- Request or acquire equipment or supplies necessary for the project.
- Assist the PI to recruit and/or interview junior researchers, maintain records and summarize interviews.
- Attend seminars and other meetings/conferences as necessary.
- Summarize project results.
- Help the PI to prepare progress reports for funding agency/industrial partner.
- Help the PI researchers to prepare other articles, reports, and presentations.
- Other duties and responsibilities may be assigned by the PI. Monthly work requirements and schedules must be discussed with the PI to ensure that the work priorities can be accomplished. Concerns about any additional responsibilities should be discussed with the PI.