

## **Postdoctoral Research Position in Operations Research**

Applications are invited for a postdoctoral research position in Operations Research at the Tepper School of Business, Carnegie Mellon University to start in Summer 2019. This will be a one-year appointment, with the possibility of a one-year extension.

The successful candidate will be working closely with Dr. Fatma Kılınç-Karzan on an on-going NSF-funded research project regarding low-complexity relaxations for nonconvex optimization problems with conic structure. Such problems are frequently used in extracting useful information from high-dimensional data, and also are critical components of operational problems in many fields facing uncertainty. This research aims to develop novel models and analysis to address key trade-offs on relaxation quality and computational tractability on a diverse set of problems. The overarching theme is to facilitate the analysis and design of efficient and scalable algorithms for these problems.

### **Background:**

The ideal candidate will be an enthusiastic and creative individual with a PhD in Operations Research, Mathematics, Machine Learning, Computer Science, Industrial Engineering or a related discipline completed by June 2019 at the latest. A strong background in convex analysis, convex optimization, and/or discrete optimization is required. Specialization on one or more of optimization under uncertainty, machine learning, and statistics will add strength to a qualified candidate's application. Expertise in one or more of optimization software and scientific computing languages Matlab, C/C++, Python, Java, and R is desirable.

### **Application:**

Interested candidates should submit the following materials via <https://apply.interfolio.com/60638>:

- A cover letter outlining their experience and qualifications as they relate to this position,
- CV that includes a list of publications,
- a sample of at least three research papers (published or working),
- research statement describing research interests and goals,
- three or more confidential reference letters directly sent to Interfolio, and
- a list of PhD level courses taken or the most recent transcript.

In order to receive full consideration, complete application packages must be received as soon as possible and no later than **March 29, 2019**. If you have any questions, please contact Administrative Coordinator, Rosanne Christy, at [rosanne@andrew.cmu.edu](mailto:rosanne@andrew.cmu.edu) or 412-268-1320.

The successful candidate will join the vibrant Operations Research group at the Tepper School of Business, a pioneer institute in the field of management science and analytical-decision making. In addition, Carnegie Mellon University provides an excellent research environment across broad areas of research in operations research, algorithms, combinatorics and optimization, machine learning, computer science, signal processing, and bioinformatics.

*Carnegie Mellon University considers applicants for employment without regard to, and does not discriminate on the basis of, gender, race, protected veteran status, disability, or any other legally protected status.*