Graduate Assistantship Position Announcement

Systems Optimization and Machine Learning Lab (SysOptiMaL) at the Grado Department of Industrial and Systems Engineering (ISE) at Virginia Tech seeks a highly qualified Ph.D. student with a full graduate assistantship, including tuition and stipend for up to four years. The position will start in Fall 2023. The undergraduate and graduate ISE programs are currently ranked fourth (4th) and seventh (7th), respectively, by U.S. News & World Report.

The ideal candidate for the graduate assistantship position should be a highly motivated individual with outstanding writing skills and a strong background in math, algorithms, data science, and computer programming. The prospective student will work on optimization, machine learning, and data science interface. The research projects involve developing data-driven optimization models, stochastic programming, and exact algorithms (e.g., decomposition algorithms) and investigating the connections between machine learning and optimization to solve logistics, healthcare, and environmental resource allocation problems. A background in operations research, data science, computer science, machine learning, applied mathematics, optimization, algorithms, and programming (C++, Phyton, JAVA, etc.) is desirable, although all qualified candidates will be considered. Strong CPLEX, Gurobi and other optimization/machine learning software skills will be considered a plus. The applicants should seek a Ph.D. degree in Industrial Engineering and Operations Research. Strong candidates without a master’s degree will also be considered should they apply for the Ph.D. program.

Interested candidates should apply as soon as possible. Candidates should contact Dr. Esra Buyuktahtakin Toy (esratoy@vt.edu) directly and send her an email with (preferably in pdf/jpeg format)

- A resume
- An unofficial copy of your graduate/undergraduate transcript.
- Unofficial copies of TOEFL and GRE scores
- Three representative publications or reports, if available.

The position will be open until filled (last updated on 9/27/2022).