



Optimization Research Team Member

Energy Exchange Istanbul (EXIST) is looking to expand its Electricity Markets Optimization Research Team. The main subjects of research deal with the complex relationships of auction mechanisms in energy market participants, along with design and development of optimization algorithms to leverage that information to optimally place orders to match supply and demand. Being a certified research and development center by TUBITAK/TEYDEB, this team is expected to conduct studies on significant research problems of the present and the future of the Turkish energy market.

As a small group that must be fairly self-sufficient, we are currently looking to hire experienced candidates, rather than new graduates. We are basically looking for team members with a preferably PhD degree in Operations Research, Mathematics, Computer Science, Industrial Engineering, who ideally have at least 2 years of experience applying their research skills to solve complex real-world problems.

The members of this research team are expected to carry out some or all of the following tasks or the responsibilities:

- Having up to date knowledge in Turkish energy market mechanisms, regulations, current projects and future challenges
- Following the market improvements particularly in Europe, the United States and neighbor countries
- Given a potential research project, defining the problem, reviewing the academic literature and current practices around the world, formulating the problem in a rigorous way and communicating and discussing it with other stakeholders
- Data and statistical analysis on the problem related data
- Algorithm design, implementation and proper documentation of the proposed solution methods
- Conducting computational experiments

All interested candidates must submit their resumes/CVs to: insankaynaklari@epias.com.tr

Qualifications

- Master's degree (or at least required classes are taken and in thesis stage) in operations research, industrial engineering, mathematics, or computer science.
- Familiarity with different types of mathematical programs
- Experience in developing exact or heuristic solution methods to hard-to-solve problems in operations research
- Experience in utilizing problem solving and analytical skills
- Experience with Java and IBM ILOG CPLEX (or other similar softwares)

Preferred Qualifications

- PhD degree in operations research, industrial engineering, mathematics, or computer science and at least 2 years of related work experience
- Technical aptitude and familiarity with the design and use of complex software systems
- Experience at least one of the following research topics: large scale optimization, stochastic optimization, inventory control, data mining
- Excellent written and verbal communication skills in Turkish and English
- Experience with large-scale datasets