

GRADUATE RESEARCH OPPORTUNITY

Two Research Assistant positions are available in Prof. Abdel-Khalik's research group in the School of Nuclear Engineering at Purdue University.

Dr. Abdel-Khalik conducts research in the areas of data analytics to advance the computational frontiers for reactor simulation in support of safety, security, and reliable and economic operation.

The successful applicants must have strong aptitude for mathematics, statistics, and abstract thinking, and enjoy working with computers and building codes. Ideal candidates are independent, initiative-takers, resourceful, and can function well in team environments.

PhD students are currently needed to support two ongoing projects.

- The first project aims to develop artificial intelligence-based techniques to deter cyberterrorists from hacking into the digital control systems of nuclear power plants. The idea is to establish another layer of defense when conventional information protection measures are bypassed by persistent attackers.
- The second project focuses on the development of advanced analytics techniques to process the large amount of data gleaned during operation to support a number of applications such as detection of early equipment failure, improving design margins and overall reactor economics.

For more information, please contact Prof. Abdel-Khalik, abdelkhalik@purdue.edu.