

Neera Jain



Graduate Institution: University of Illinois at Urbana-Champaign

Location: Urbana, IL

Graduate Discipline: Mechanical Engineering

Hometown: Libertyville, IL

Research Interests:

My research interests lie at the intersection of control theory and energy systems. While gains in energy system efficiency have traditionally been obtained via hardware improvements, techniques in sensing, control, and optimization offer additional means through which such improvements can be attained. My doctoral research focuses on the development of algorithms to optimize the operation of different energy and power systems.

About me:

I completed a SB in mechanical engineering at the Massachusetts Institute of Technology in 2006. In 2009, I completed a masters' degree in mechanical engineering at the University of Illinois at Urbana-Champaign with Prof. Andrew Alleyne. I am now a doctoral candidate in the Alleyne Research Group.

Beyond my technical interests, I have an interest in STEM education policy. In 2006, I completed teaching certification in secondary (8-12) mathematics through the MIT Teacher Education Program in Massachusetts. My experiences teaching 8th and 10th graders and later as a T.A. at Illinois, have given me valuable insight into the challenges facing STEM education in the United States. If we are not galvanizing young students to become engineers and scientists, we cannot expect to meet the great technical challenges of our generation. I strongly believe that we, as engineers and scientists, need to play a critical role in improving attitudes towards math and science the U.S.

I am looking forward to a career either as a professor or as a technical manager at a research laboratory. I hope to utilize my background in control systems to not only make an impact on the way we control energy systems, but also to improve energy policy so that technology can be more effectively deployed and utilized in our country. I am looking forward to meeting the other recipients, learning about their research, and collaborating with those who share an interest in education and/or energy policy.



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