

John Hanson



Graduate Institution: Massachusetts Institute of Technology

Location: Cambridge, Massachusetts

Graduate Discipline: Nuclear Science and Engineering

Hometown: Columbus, Ohio

Research Interests:

During my undergraduate career I have worked in the lab of Dr. Thomas Blue at Ohio State, investigating the potential use of fiber optics for applications in nuclear reactor instrumentation. We have been studying the performance of both traditional silica fibers, and single-crystal sapphire fibers in a high temperature, high radiation environment. The long term goal of this research is to create an in-core sensor network that will allow us to measure important in-core variables such as temperature more reliably and accurately than current instrumentation allows. My other interests include nuclear materials, heat transfer, and reactor design. I hope to pursue research in one of these areas beginning in the fall at MIT.

About me:

I graduated from Ohio State in June, 2010 with a B.S. in Mechanical Engineering and a B.S. in Economics, and I will start at MIT in the fall, pursuing a PhD in Nuclear Science and Engineering. I am interested in the advancement of nuclear power as an integral part of the solution to our nation's energy challenges. I hope to contribute to this goal through my work as a researcher at a national lab or as a professor after graduation. In addition, I am interested in energy policy. I spent last summer working for the American Nuclear Society (ANS) in Washington D.C., writing a policy paper about the government's role in financing new nuclear power plants. This experience has motivated me to stay involved in energy policy throughout my graduate and post-graduate career. I have also served as treasurer of the ANS Student Section at Ohio State, and I am an active member of the American Society of Mechanical Engineers, having served as an adjunct member of the Board on Government Relations. In addition, I have worked for three years as an Undergraduate Teaching Assistant for the Fundamentals of Engineering for Honors program at Ohio State. In my free time I enjoy playing volleyball, and I have spent four years playing on the club volleyball team.



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