

# Daniel Shuldman

“Dan”



**Graduate Institution:** University of California Berkeley

**Location:** Berkeley, CA

**Graduate Discipline:** Applied Physics

**Hometown:** South Brunswick, NJ

## Research Interests:

*Currently, my work focuses on linear and nonlinear optics. In previous research, I created photonic lattices for testing new optical waveguides and bandgap guiding of light. Currently, I'm involved in an experiment to measure the negative index of refraction of some new fishnet metamaterials using a femtosecond laser source and an interferometer. But where my passion really lies is with clean energy. I would like to work on ways to efficiently create and store hydrogen fuel, possibly through the use of photocatalytic nanoparticles.*

## About me:

*Using the skills I have acquired over time, my plan is to work on cutting edge research in photovoltaics, hydrogen fuel creation and other clean energy resources. After graduating from UC Berkeley, I plan to become a professor and hope to stay in California's wonderful climate with access to its rich and diverse landscapes. Outside of academics, my passion lies in nature. Backpacking, rock climbing, kayaking... if you name a sport that involves getting dirty, I probably love it.*

*During the academic year, between classes and research, you can often find me playing Frisbee with friends on memorial glade or practicing guitar. Music is another of my passions and I believe that music has a way of uniting people and easing tensions. Although playing the guitar is one of my hobbies, it is not one of my better skills. So instead of making great music, I am more likely to be found listening to it. It's my opinion that people like Bob Dylan, John Lennon and Paul McCartney improved society by changing the beats and melodies we hear every day. In that light, I want to work towards creating free energy in the hopes that, in my lifetime, I will be a part of a free and peaceful world.*



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