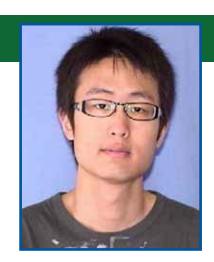# Ernest Ryu

Graduate Institution: Stanford University

Graduate Discipline: Applied Mathematics

Hometown: Daejeon, South Korea

Relevant SC Research: Advanced Scientific Computing Research

Research Interest:

Broadly speaking, my interest is the non-PDE side of applied mathematics and especially convex optimization. The mathematical concept of convex optimization is quite modern, i.e. less than 100 years. It is the past 30 years, however, during which convex optimization has grown in its utility as a mathematical tool due to the rapid increase of computing power. So currently we are in the era where convex optimization is arguably as powerful of a tool as calculus or linear algebra, but has not yet received the recognition it deserves from the general scientific community. One of my goals as an applied mathematician is to promote the use of convex optimization by finding applications in various fields.

About Me:

This fall I enter my 3rd year at Stanford University studying in the Institute for Computational and Applied Mathematics, a.k.a. applied math. I graduated from Caltech in 2010 majoring electrical engineering and physics. I am member of the student group titled Computational Consulting, which provides consulting service in applied mathematics to the extended Stanford community.