



**Heyuan Liu, The 2017-18
Rafael Rodriguez/Golden Age Fellow
at International House, UC Berkeley**



Heyuan Liu was born in Shanghai, the biggest city in China. Like many of his friends, he was enthusiastic about mathematics problems as a youngster. In Shanghai High School, he met lots of like-minded friends and determined to devote himself to mathematics. Heyuan earned his bachelor degree in the School of Mathematical Sciences, Peking University. During his study there, he learned advanced mathematics and their applications for the first time. He also took part in a project from industry, which focused on power prediction of wind turbines. After that experience, Heyuan found that his interests lay in mathematical tools for real world problems.

In Heyuan's bachelor study, he mainly focused on stochastic analysis and its applications. He studied several stochastic volatility models, and used asymptotic analysis to estimate the parameters in the model. His thesis is in non-Markovian rare event, which is in the interface of differential equation, computational chemistry and biology. Also, he is very interested in optimization problems, especially in fast algorithm for combinatorial problem and convex optimization.

“Berkeley is a great place for research. I am looking forward to the very good scholars and students there. To me, it is important to discuss with others to exchange ideas. I-House provides me a fantastic opportunity to meet friends from different subjects and different countries. As a student in Industrial Engineering and Operations Research (IEOR), it is always good to get familiar with unsolved problems from all regions.”

“As a fan of San Francisco Giants, I am very lucky to be enrolled in UC Berkeley. I am looking forward to enjoying games in AT&T Park with friends from I-House. Also, it is good to know other sports from friends in I-House. Along with ballgames, I am interested in video games, especially Dota 2. It is cool to play with friends and thus learn more tactics from all over the world.”



The Rafael Rodriguez/Golden Ave Graduate Fellowship was made possible by the generosity of I-House alumni from the “Golden Age” (1946-1952), who created the fellowship in honor of fellow alumnus Rafael Rodriguez of Costa Rica. The fund provides for a full room and board grant for one entering graduate (Ph.D.) international student of great promise who may lack the financial resources to come to Cal and is deemed likely to benefit from, and contribute to, life at I-House.