For this Independent Study Course, I will be exploring the use of Hierarchical Reinforcement Learning, specifically the use of high level options, in constructing procedures by which agents can discover new skills autonomously. I will do this by surveying modern Skill Discovery and Skill Construction techniques (through weekly readings) and implementing one or two of the techniques that I find the most relevant. I plan to devote 10-20hrs a week throughout the Spring semester to this study. I will be meeting/updating Dr. Konidaris over email or video chat, on a weekly/biweekly basis and will meeting/updating with my co-advisor at USF, Dr. Sun, monthly.

By the end of the course I will have written a short survey of the field addressing what I've learned and implemented some of the state-of-the-art techniques in Skill Discovery and Skill Construction on problems of my own.