A Process For Conducting (Doctoral) Research in Robotics

Abstract

Conducting cutting edge research, especially at the doctoral level can be a confusing task. At once one must get familiar with the state of the art, identify interesting problems that have a hope of being solved and then connect them with appropriate approaches, hopefully ending with a significant contribution with compelling examples. Tall order! At first blush the process seems to defy any organization or progression-- topics, research styles, infrastructure vary so much that it would seem impossible to generalize at all.

Nevertheless, I have been trying to learn from successful examples of research and have been trying to formulate a loose set of heuristics on how to get started and how to progress in research and will take a stab at presenting these ideas in an informal seminar. My primary aim is not to sell a specific formula but to get people to discuss the tacit process that we employ when we think about how to progress in research.

Speaker Bio

Sanjiv Singh is a Research Professor at the Robotics Institute, Carnegie Mellon University. He received his B.S in Computer Science from the University of Denver (1983) M.S in Electrical Engineering from Lehigh University (1985) and a PhD in Robotics from Carnegie Mellon (1995). He is the Editor-in-Chief of the Journal of Field Robotics.