



PhD Student Opening

L.C. Smith College of Engineering and Computer Science

This notice is with regards to an opening for a PhD student under the guidance of Prof. Makan Fardad, in the Department of Electrical Engineering and Computer Science at Syracuse University.

<http://www.lcs.syr.edu/faculty/fardad/>

The general area of research for the successful applicant is controls and dynamical systems. His/her PhD project will be on the optimal distributed control of large-scale systems. One application of this research would be in automated highways, where large numbers of vehicles are coordinated to follow desired trajectories while minimizing fuel consumption. Other application areas include the control of arrays of microelectromechanical devices, unmanned aerial vehicles, and large satellite constellations.

The distributed aspect of the problem means that the control signal is not computed by a high-level controller that is aware of the state of all systems. Instead, our desired control algorithms are those that allow each system to compute its control action based only on the limited information it receives from its neighboring systems. This research is highly interdisciplinary, and draws heavily on mathematics and optimization theory. Applicants with a masters degree or a strong background in applied mathematics are preferred.

The successful student will be financially supported for the duration of his/her studies through research and teaching assistantships at Syracuse University. Please contact Prof. Makan Fardad, makan@syr.edu, for more information.