Teaching Statement
Glenn Judd

Computer technology has a direct impact on nearly every field of human endeavor. Computer science is, consequently, a broad, volatile field with numerous open problems. Thus, computer science pedagogy must produce graduates who are capable of coping with the vicissitudes of technological and market forces and—more importantly—who thrive on exploiting the open problems and opportunities present in a dynamic career environment. Graduates with these skills will have successful, enjoyable careers thereby encouraging others to enter the field, and ameliorating the current disparity between strong demand for computer science graduates and declining computer science enrollment.

The broad, dynamic nature of the field makes instruction in computer science particularly challenging. I believe it is essential to first give students a rigorous foundation upon which they can then build skills tailored to particular problems. Looking back, I feel I learned the most in classes where the instruction was not only didactic, but inspirational. Thus, a teacher’s role is twofold: to instruct and inspire.

Inspiration comes from not just conveying enthusiasm, but by giving students hands-on experience solving problems. Laboratory experience serves not only to inculcate the ability to acquire new skills, but can be designed to teach students the ability to search for new opportunities and novel approaches. I am particularly interested in teaching courses with strong laboratory components such as graduate and undergraduate wireless networking, internetworking, operating systems, and mobile systems courses as well as undergraduate database, architecture, introductory programming, and digital logic courses. I have had experience as a teaching assistant in networking, operating systems, and introductory programming courses, and I have enjoyed assisting students with homework, in the lab, and during recitations.

By encouraging students to work on projects related to contemporary research, I believe it is possible to inspire students with a love for creative problem solving, and to allow interested students to transition to research. At Carnegie Mellon, I have had the opportunity to mentor two undergraduate and two master’s level students on projects related to my research.

By giving students a strong foundation, allowing them to develop hands-on experience with creative problem solving, and conveying genuine concern for students’ welfare, I hope to contribute to the education of successful computer science graduates.