

Teaching philosophy

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I teach undergraduate courses in Computer Science, primarily introductory programming but also courses in Data Structures and Algorithms, Computer Architecture, and Parallel Programming. I place a special emphasis on a hybrid approach to engage students in lecture by mixing traditional lecture format with active learning techniques including self-reflection, pair programming, peer critique, kinesthetic activities, outreach experiences, and problem based learning. Because students respond differently to various teaching styles, I use several of these techniques in the same course through the semester to broaden participation in class. I also believe that significant learning often occurs outside of lecture. To foster this learning, I encourage structured peer groups and often offload concepts from lecture into creative and challenging assignments that require students to engage the material and bring questions to class, office hours, peer groups, and teaching assistants. Recent assignments in bioinformatics, world hunger simulation, traffic engineering, and game development for mobile platforms all reinforce and teach significant course concepts while allowing students to assess the impact of the knowledge they have gained. My goal is to empower each student to create meaningful solutions to computational problems.