

Fall 2012 CS 4784 HCI Capstone Course *Developing Computational Thinking in Middle School Curricula*



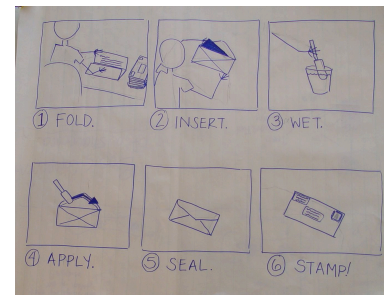
This is a special senior capstone to work directly with teachers to identify and prototype a few examples of computational thinking that are appropriate for middle school students. Working in small teams students will identify and prototype a few examples of computational thinking. The faculty organizers believe that there are opportunities to apply computational thinking in the existing curriculum in different subject areas of middle school education. We seek a few good students who are willing to explore this.

This is a project-based class. It will be an intensive immersion into what works. It will also require some reflection on the students' part to see what parts of their computer science education can be appropriated for middle school students. The project will have multiple faculty members who are working on the project advising and directing the students. In addition, a few graduate students recruited from computer science and education will be enrolled in 6000 level class to provide curriculum development guidance.



There will be a single 3 hour class meeting each week (Tuesday 6–9 PM, location TBD) and regular meetings with middle school teachers.

For further information
contact:



Steve Harrison (srh@cs.vt.edu),

Deborah Tatar (dtatar@cs.vt.edu),

Dennis Kafura (kafura@vt.edu),

Manuel Perez-Quinonez (perez@cs.vt.edu), or

Cliff Shaffer (shaffer@cs.vt.edu).

**Can you teach someone to think like
a computer scientist?**