K-12 Computing Education Seminar Projects and Events

This quarter, you will work with a small team (up to 4) to create resources related to K-12 Computing Education. The primary goal is to get you thinking about ways to present computing to younger learners and to gain familiarity with tools commonly used in K-12. The secondary goal is to produce usable resources. Deliverables will vary between projects but you will all be expected to share what you create on the <u>DawgBytes wiki</u>. Below are some ideas but feel free to design your own projects!

- Create self-paced Processing (<u>https://processing.org/</u>) materials for workshops
- Create self-paced Scratch (<u>http://scratch.mit.edu</u>) materials for workshops
- Create AppInventor (<u>http://appinventor.mit.edu</u>) projects or lessons
- Create Lilypad Arduino, Arduino, MaKey MaKey or .NET Gadgeteer workshop materials
- Create CS Unplugged-type mini-sessions for open house and/or school visits (e.g. binary, discrete math card tricks)
- Create mini lessons on how the Internet works, how a computer works, etc
- Create materials for Scribbler-based robotics programming (especially for discovery days)
- Create a hands-on activity for middle or high school girls who took summer camp (in Processing)
- Partner with a local high school (your alma mater?) to create a computer science club
- Invite students from a local high school (your alma mater?) for a field trip

Major Events

Engineering Discovery Days