

Computing for Good

Experiences in Humanitarian Computing

Fall 2014

Overview:

How can computing help make the world a better place? Why is providing connectivity important? How best to do so? How can computers help a nation heal? Can we avoid wars and track diseases in time to avoid epidemics? We explore problems faced by developing countries and underserved populations from a computer science perspective.

Note: This course is cross-listed for graduate students in the College of Computing as CS 6150 and undergraduates as CS 4911. This class satisfies the senior capstone design requirement for the undergraduate BS in Computer Science and the BS in Computational Media.

Learning Objectives:

- To undertake a significant, semester-long design project working on a team and using state-of-the-art project management tools.
- To develop oral presentation skills.
- To develop a rudimentary understanding of a domain of social importance.
- To develop a rudimentary understanding of the key issues in humanitarian computing, including sustainability, resource availability (or lack thereof), novice user design, design for diverse user populations.

Professors:

Dr. Beki Grinter (beki@cc.gatech.edu)

Office: Room 329, 3rd Floor, Technology Square Research

Office hours: by appointment

Dr. Ellen Zegura (ewz@cc.gatech.edu)

Office: Klaus 3342

Office hours: Monday 12-1pm or by appointment

Teaching Assistant:

Gheric Speiginer (gheric.speiginer@gatech.edu)

Office: Technology Square Research Building, Augmented Environments Lab

Office hours: Fridays 11am-noon when class is not meeting

Grading (final version):

Class participation: 15%

 Reading reflections: 5%

 Attendance: 5%

 Team-to-team feedback: 5%

Project management – sprint reflections and sprint plans: 15%

Project documents: 45%

 Team contract: 0%

 Requirements document: 10%

 Design document: 10%

 Customer deliverables

 (user manual, sustainability plan, installation guide, code): 25%

Presentations: 25%

 Design presentation: 5%

 Demo presentation (includes running code): 5%

 Final presentation (posters and demos): 15%

Class schedule: MWF, 11:05-11:55am

Class location: College of Computing Building 102

C4G lab location: Klaus 3405. Buzzcard access will be given to all students. You can use this space to hold group meetings, keep artifacts, etc. There are some movable, two-sided whiteboards in the room; feel free to claim one (side) for your team and label it as such.