

Lewis Baumstark

Associate Professor of Computer Science

Teaching and Student-Related Activities, 2013-2014

Student-Related Activities

Directed Research (CS4983)

- Anthony Kyle Bond, “Raspberry Pi Cluster” (Summer 2013)
- Brian West, “Swarm Algorithms” (Spring 2014)

Independent Studies (CS4981)

- Lewis Christmas, “A \$50 Fully-Programmable Hobby Robot” (Summer 2013)
- Alex Teichner, “Augmented Reality” (Fall 2013)
 - Presented poster at 2014 ACM Southeast Regional Conference, March 29-29, 2014, Kennesaw, GA. Article No. 45. DOI: <http://dx.doi.org/10.1145/2638404.2638519>
- Drew Justus, “Automation Systems” (Fall 2013)
- Brian West, “Robot Coordination” (Fall 2013)
- Terry Holt, “Minisumo Robotics” (Spring 2014)
- Carlos Harry, “Computing Accessibility” (Summer 2014)
- Ayaan Kazerouni, “Computing Accessibility” (Fall 2014)
 - Awarded 2nd place in 2015 COSM Research Day competition for this work. Presentation title: “Fall-detection in walkers used by the disabled and elderly”

Computing Internships Advised (CS4986)

	2013	2014
Spring	Cody Wahl Jonathan Strickland	Cori Comi Drew Justus Bryan Patterson Ryan Pepin Matthew Stucki
Summer	Stephen Kendrick Thomas Patterson	Terry Holt
Fall	Cody Wahl	Lewis Christmas Charles Ferguson Ryan Pepin

Teaching-related Research

Conference Presentation

L. Baumstark and E. Rudolph, “Automated Online Grading for Virtual Machine-based Systems Administration Courses”, in *Proceedings of ACM Special Interest Group on Computer Science Education (SIGCSE’13)*, Denver, CO, March 2013, pp. 477-482. DOI: <http://dx.doi.org/10.1145/2445196.2445340> (acceptance rate: 37.8%)

I have been teaching my systems administration courses for many years using *virtual machines* (VMs). These allow students to work on operating system and network configuration assignments on real systems, but in a portable sandboxed environment. They present logistical issues when grading, however.

This work solves the grading problem by using an automated grader that is capable of examining a student's VM and providing immediate feedback. Further, the system allows for an iterative grading model (similar to the draft-revise cycle for term papers) that guides students through their assignments.

Poster Presentation

L. Baumstark, "A Combat Robotics Course: Programming Meets Computer-Aided Design and Fabrication", in *Proc. Of SIGCSE'13*, Denver, CO, March 2013, p. 729.

Teaching Awards

- CS Department, Outstanding Undergraduate Teacher of the Year, 2012-2013
- CS Department, Outstanding Graduate Teacher of the Year, 2014-2015

Both of these awards are nominated by, and voted upon, by the CS student body.

Other

- Sponsored Combat Robotics Teams (2 teams, 4 students). Competed at:
 - Chattacon, January 2013
 - Dragon Con, September 2013.
- Guest presentation, "3D Printing", for CHEM 4985 (instructors: Sharmista Basu-Dutt, Doug Stuart, Spencer Slattery), February 14, 2014.
- Faculty Sponsor, Association for Computing Machinery (2013, 2014)
- Faculty Sponsor, Upsilon Pi Epsilon (Computer Science Honor Society) (2013, 2014)

Courses Taught

Spring 2013

- CS3280: System and Network Administration
- CS1301: Computer Science I (2 sections, as studio instructor)

Summer 2013

- CS6221: System and Network Administration (graduate)

Fall 2013

- CS1301: Computer Science I (new prep)
- CS1302: Computer Science II (new prep)
- CS6241: Software Development I (Graduate, new prep)

Spring 2014

- CS1302: Computer Science II
- CS3280: System and Network Administration
- CS6242: Software Development II (Graduate, new prep)

Summer 2014

- CS6261: System and Network Administration (Graduate)

Fall 2014

- CS1301: Computer Science I
- CS6241: Software Development I (Graduate, 2 sections)

Evidentiary documents are provided in a zip file distributed with this document as well as at http://lewisb.wiki.westga.edu/cosm_teaching_award_portfolio_2015.