



Collaborative Research Experiences for Undergraduates (CREU)

Mark Goadrich

Centenary College of Louisiana

CCSC Mid South 2013



CREU Details

- Collaborative REU for teams of students from underrepresented groups in CS
 - Women, Persons of Disability, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiian, and Pacific Islanders
- Encourages consideration of research and graduate study as a career path
- Funded through NSF Broadening Participation in Computing (BPC) grant

CREU Details

- Academic Year Funding
 - \$3000 stipend per student
- Optional Summer Funding
 - \$4000 stipend per student
 - (10 weeks, 40hr / week)
- Travel/Equipment
 - Not to exceed \$1500 per team
- No funding available for faculty



<http://antialiasfactory.deviantart.com>

Creative Commons

Our CREU Team 2010-2011

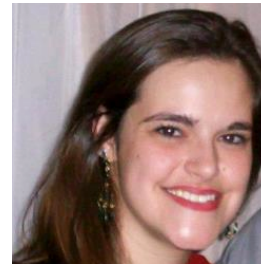
- Centenary College, LA

- Kathryn Hardey '12
- Eren Corapcioglu '12
- Dr. Mark Goadrich



- Allegheny College, PA

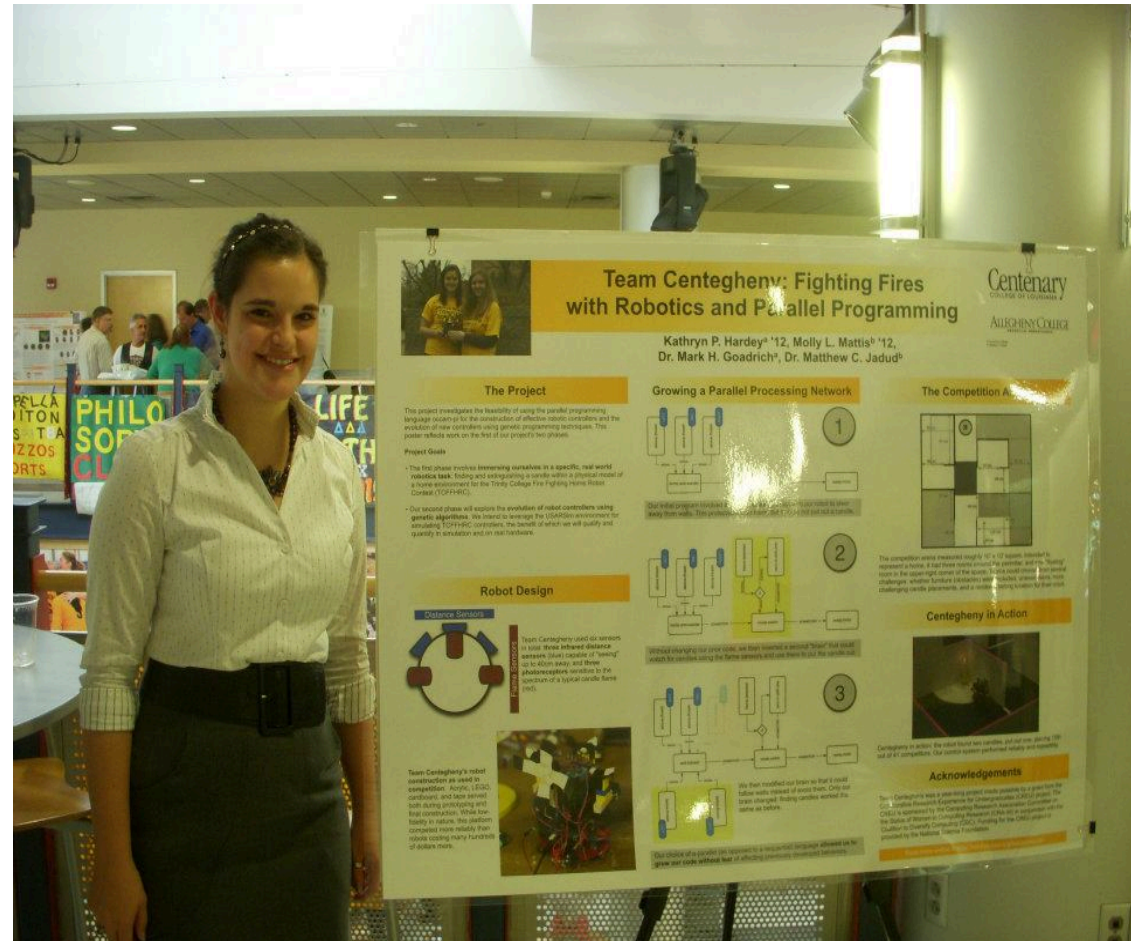
- Molly Mattis '12
- Dr. Matthew Jadud



Our CREU Team 2010-2011

- **Exploring and Evolving Subsumptive Control for Real and Virtual Rescue Robots**
- Academic Year Proposal
 - Build low-cost robot using Arduino
 - Program controller in parallel with occam-pi
 - Participate in Trinity College Fire Fighting Home Robot Contest
- Summer Proposal
 - Create simulator for contest environment
 - Evolve controller using genetic programming

Trinity Robotics Contest - April 2011



Full Paper at GECCO - July 2012



Lessons Learned

- Hold Weekly Meetings
 - Both local and remote
- Use Online Collaboration Tools
 - Skype chats, Google Docs, Subversion
- Allow for exploration and discovery
- Keep project achievable and grounded

CREU Information for 2013

- Approximately 6 page proposal
- Application Deadline: **May 20, 2013**
- Notification: **June 14, 2013**
- CREU Website
<http://cra-w.org/creu>