

Kenneth Clayton McKell

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Education

- **University of Hawai'i at Mānoa** Honolulu, HI
Doctor of Philosophy in Electrical Engineering *In Progress*
 - Advisor: Prof. Gürdal Arslan
- **University of California Los Angeles** Los Angeles, CA
Master of Science in Mechanical Engineering *2007*
 - Advisor: Prof. Jeff Shamma
- **University of California Los Angeles** Los Angeles, CA
Bachelor of Science Summa Cum Laude in Mechanical Engineering *2006*

Honors and Awards

ARCS-Honolulu Kresser Award in Engineering *2010*
UH Mānoa Electrical Engineering Departmental Fellowship *2007*
UCLA Mechanical and Aerospace Engineering Departmental Fellowship *2006*
Northrop Grumman Foundation Scholarship *2005*
University of California Regents Scholarship (4-Year) *2002*

Teaching Experience

- **Teaching Assistant** UH Mānoa
EE 341L: Communication Systems Laboratory *Aug. 2009 - Dec. 2009*
 - Seven hours of laboratory instruction, supervision and office hours weekly
 - Curriculum overhaul including instruction in Matlab and rewriting the laboratory manual
 - Average student-rated effectiveness: 4.8/5
- **Teaching Assistant** UCLA
MAE 107L: Dynamic Systems Laboratory *Apr. 2007 - Jun. 2007*
 - Two hours of lecture, two hours of laboratory supervision and office hours weekly
 - Homework and laboratory report grading

Research Experience

- **UH Mānoa Electrical Engineering Dept.** Honolulu, HI
Graduate Assistant *Aug. 2007 - Aug. 2009, Jan. 2010 - Present*
 - Advisor: Prof. Gürdal Arslan
 - Work on applying game theoretic methods to improve results for distributed network control

University of Colorado

Boulder, CO

- **Electrical, Computer and Energy Engineering Dept.**

Visiting Researcher

Jan. 2010 - May 2010

- Sponsor: Prof. Jason Marden
- Applied Shapley value analysis to the graph coloring problem
- Investigated the role of information locality in the efficiency of distributed motion coordination equilibria

- **California Institute of Technology Computer Science Dept.**

Pasadena, CA

Visiting Researcher

Aug. 2008

- Sponsor: Prof. Adam Wierman
- Investigated methods for determining efficiency of equilibria in Distributed Welfare Games

- **UCLA Mechatronics Lab**

Los Angeles, CA

Undergraduate Researcher

Sep. 2005 - Dec. 2005

- Advisor: Prof. Tsu-Chin Tsao
- Investigated compact linear actuators with a focus on hydraulic amplification of piezoelectric motion to replace camshaft as automobile engine actuator

Work Experience

- **Honeywell Aerospace**

Torrance, CA

Intern

Jun. 2005 - Sep. 2005

- Full time project engineer intern in the Space Repair Depot for electromechanical hardware on Space Shuttle and International Space Station Alpha
- Trained in program management and system and manufacturing engineering

- **UCLA Mechanical and Aerospace Engineering Dept.**

Los Angeles, CA

Reader

Jan. 2005 - Mar. 2005

- Homework grader for MAE 182A: Mathematics for Engineers

- **Kennedy/Jenks Consultants: Engineers & Scientists**

Palo Alto, CA

Intern

Jun. 2004 - Sep. 2004

- Full time summer intern for civil and environmental engineering firm
- Practical training in database software, civil building codes, and drafting software

Professional Development

- Workshop: Rethinking Science and Engineering Learning and Teaching. Institute for Scientist and Engineer Educators. Pukalani, HI. Jan, 2009.

Professional Activities

- Student member of IEEE: 2008 - *Present*
- Presentation to the ARCS-Honolulu Judging Committee. 24 April 2010. [mp4](#), [pdf](#)
- Poster for the ARCS-Honolulu Judging Committee. 24 April 2010. [pdf](#)

Professional Service

- Reviewer, 2011 International Conference on Network Games, Control and Optimization

- Reviewer, 2011 International Conference on Social Computing, Behavior-Cultural Modeling & Prediction
- Reviewer, 49th IEEE Conference on Decision and Control
- Reviewer, 2009 IEEE International Conference on Communications

Skills

Applications: Matlab, Simulink, SolidWorks, L^AT_EX, GNU Image Manipulation Program (GIMP), Adobe Photoshop, Python, MS Office

Languages: English and conversational Spanish

Personal

Clay was born in Los Gatos, CA and is a citizen of the United States. He Earned the Eagle Scout award from the Boy Scouts of America in 2001. In his spare time, he enjoys backpacking, playing ultimate frisbee, photography, and volunteering in his community.