# Kenneth Clayton McKell

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### Education

# University of Hawai'i at Mānoa Doctor of Philosophy in Electrical Engineering Advisor: Prof. Gürdal Arslan University of California Los Angeles Master of Science in Mechanical Engineering Advisor: Prof. Jeff Shamma University of California Los Angeles 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

### Publications

• McKell, K. C., S.-K. Chai and G. Arslan, *Modeling Ethnic Conflict with Altruism*, Submitted to: 51<sup>st</sup> IEEE Conference on Decision and Control, Maui, Hawaii, 2012.

### Research Experience

# UH Mānoa Electrical Engineering Dept.

Honolulu, HI

Graduate Assistant

Aug. 2007 - 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

Undergraduate Researcher

Los Angeles, CA 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

# 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

# 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

- Professional Development Program. Institute for Scientist and Engineer Educators and Akamai Workforce Initiative. Hawaii, 2012.
- 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

# **Professional Service**

- Referee, 3rd IFAC Workshop on Distributed Estimation and Control in Networked Systems
- Referee, 2011 International Conference on Network Games, Control and Optimization
- Referee, 2011 International Conference on Social Computing, Behavior-Cultural Modeling & Prediction
- Referee, 49th IEEE Conference on Decision and Control
- Referee, 2009 IEEE International Conference on Communications

### Skills

**Applications:** Matlab, Simulink, SolidWorks, LATEX, GNU Image Manipulation Program (GIMP), Adobe Photoshop, Python, MS Office, HTML, CSS

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.

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