

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*

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
 - Modeling complex systems and predicting outcomes using game theory
- **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

Teaching Experience

- Teaching Assistant** UH Mānoa
 • *Phys 152L: General Physics Lab II* *Aug. 2012 - Dec. 2012*
 - Eight hours of electromagnetism laboratory instruction, supervision and office hours weekly
 - Responsible for weekly quizzes design to assess student learning both pre- and post-lab
- Instructor** Akamai Workforce Initiative
 • *Maui Short Course* *Jun. 2012*
 - Weeklong short course for undergraduate engineering interns
 - Lead instructor for optics activity investigating the particle nature of light
 - Co-designed and team-taught an activity demonstrating engineering design principles of photographic systems
- 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, L^AT_EX, GNU Image Manipulation Program (GIMP), Adobe Photoshop, Python, MS Office, HTML, CSS

Languages: English and conversational Spanish