Position: Postdoctoral Scholar, Level II  
Institute: California Plug Load Research Center, Calit2 Irvine

Summary: California Plug Load Research Center seeks a highly motivated doctoral researcher with excellent teamwork experience to lead immediate research and development project(s) for energy efficient electronics.

Requirements: Applicants must have a Ph.D. in electrical engineering, telecommunications or physical sciences with strong experimental research skills and substantial experience in embedded electronics design, prototyping and testing. Direct experience conducting research and practical development related to energy efficiency, home appliances, or consumer electronic devices is a plus. Familiarity with electronic device energy standards, such as Energy Star, is a plus.

- 3+ years experience in system engineering, and system and device level problem solving, including modeling and reproducing production problems. Develop prototypes and proof of concepts systems.
- Experience with development and integration of embedded Linux systems for smart appliance/electronics.
- Experience with power analysis of electronic devices are preferred
- Familiarity with object-oriented programming, multithreaded programming, C/C programming in user and kernel spaces, and Java/J2SE/JNI programming.
- Familiarity with data transfer protocols and standards.
- Familiarity with master/slave and distributed network architectures.
- Good verbal/written communication skills and be self-starters with the ability to work independently

Duties and responsibilities:

- Coordinate research team(s) consisted of technicians and student researchers.
- Regular information retrieval and update regarding energy efficient technologies, products, and policies, exhausting sources such as IEEE Consumer Electronics Trans, Energy Star website and DoE public hearing process.
- Test electronic products’ power consumption and power saving modes.
- Design, test, and demonstrate prototypes and platforms for better energy performance
- Investigate effective triggers for system refresh and scheduled activities.
- Compare commercially available solutions for power saving control with built-in system solutions.
Produce and publish papers, reports and proposals collaboratively or indecently.

**About CalPlug:** The California Plug Load Research Center (CalPlug) was established to improve energy efficiency in the use and design of appliances and consumer electronic devices. The California Energy Commission is one of the major sponsors for CalPlug’s research. CalPlug focuses on energy efficiency solutions, efficiency evaluations of consumer electronics, standards development, education and public outreach, and user behavior studies. CalPlug will address challenges in plug load efficiency for both residential and commercial buildings by collaborating closely with utilities, manufacturers, advocacy groups, research institutions, and energy policy makers. The center will assist in developing future appliance efficiency standards and incentives for manufacturers and retailers.

**Application Procedure:** To apply, please send a cover letter, curriculum vitae and the names and addresses of three references (please do not solicit letters) to the address listed below:

Academic Affairs  
RE: Postdoctoral Scholar, Level II  
CALIT2  
4006 Calit2 Building  
Irvine, CA 92697-2800  
Email: icastane@calit2.uci.edu, cc: yzhang@calit2.uci.edu

This is a one-year appointment. Renewal for subsequent years is dependent on continuation of external funding.

The University of California, Irvine is an equal opportunity employer committed to excellence through diversity.