Kaylee Mann

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PUBLICATIONS & PROCEEDINGS

Mann, K.; Massey, T.L.; Guha, S.; van Kleef, J.P.; Maharbiz, M.M., **"A Wearable Wireless Platform for Visually Stimulating Small Flying Insects"** *Engineering in Medicine and Biology Society (EMBC), 2014 36th Annual International Conference* (Podium Presentation)

Monica Lin, Amy Liao, Elisabeth Leeflang, Yasser Khan, Felippe Pavinatto, Kaylee Mann, Agne Naujokas, David Young, Shuvo Roy, Michael Harrison, Ana Claudia Arias, Vivek Subramanian, Michel M. Maharbiz, **"Impedance Sensing Device Enables Early Detection of Pressure Ulcers in Vivo"** 17 Mar. 2015. *Nature Communications 6, Article number: 6575*

Amy Liao, Monica Lin, Lauren Ritz, Sarah Swisher, David Ni, Kaylee Mann, Shuvo Roy, Michael Harrison, Ana Arias, Vivek Subramanian, David Young, Michel Maharbiz. **"Impedance Sensing Device for Monitoring Ulcer Healing in Human Patients"** *Accepted for Engineering in Medicine and Biology Society (EMBC), 2015 37th Annual International Conference*

Joshua P van Kleef, Travis Massey, Kaylee Mann, Michel M Maharbiz. **"Visually Gated Action Completion in an Insect"** *Upcoming Release Date TBD. Manuscript submitted to journal*

Yasser Khan, Felippe J. Pavinatto, Monica Lin, Amy Liao, Sarah L. Swisher, Kaylee Mann, Vivek Subramanian, Michel M. Maharbiz, Ana C. Arias. **"Inkjet-Printed Flexible Gold Electrode Arrays for Bioelectronic Interfaces"** *Upcoming Release Date TBD. Manuscript submitted to journal*

EDUCATION

University of California Berkeley

B.S. Electrical Engineering and Computer Science, May 2015; 3.7 GPA

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RESEARCH

Research Assistant in Maharbiz Group at UC Berkeley — Feb. 2012-Present

Energy harvesting board developed for fuel cells that run on glucose and are implanted into beetles.

Head mounted visual stimulation device for insects designed to enable remotely controlled flight. Device has been tested with Dragonflies, and Locust. Development ongoing. (paper above)

Multi-electrode array impedance mapping: Developed firmware and custom data logging software. (paper pending)

TEACHING

Undergraduate Student Instructor (uGSI) for CS61A: *The Structure and Interpretation of Computer Programs* — Aug. 2012-Dec. 2014

Taught discussion and lab sections for UC Berkeley's intro CS class.

Helped develop curriculum including exam questions and discussion worksheets.

uGSI for EE42/100 — Summer 2013

Intro electrical engineering class for non-majors

(continued)

uGSI for EE20 *The Structure and Interpretation of Signals and Systems* — Spring 2015

Intro electrical engineering class presenting the mathematical fundamentals of Electrical Engineering.

Taught discussion and lab sections.

Developed homework and exam exercises in collaboration with other GSIs.

WORK EXPERIENCE

Intern, Northrop Grumman Global Hawk Program — May-Aug. 2011

The Global Hawk is a combat-proven high altitude military reconnaissance UAV.

Developed applications for database interface and software management. VBA, MS ACCESS

Developed web-based tool from scratch for software peer review.

SKILLS

Software Dev.:	Python, Java, C/C++, Scheme, SQL, UNIX
Web Dev.:	Django, HTML, CSS, LaTeX
Artistic/Creative:	Blender3D, Inkscape Vector Graphics, Gimp, Swing Dance
Hardware:	PCB design & fab. with Eagle and SMD
Embedded Dev.:	Extensive experience with ATMEL and MSP430 micro-controller devices
Human Languages:	English (native) Spanish (proficient) Japanese (intermediate)

HONORS

HKN EECS Honor Society Inductee

SURF Rose Hills Research Fellowship

QUEST Qualcomm Summer Research Fellowship

UC Berkeley Regents' and Chancellor's Scholarship