

Kaylee Mann

www.kayleemann.com

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.

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

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, Felipe 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

Yasser Khan, Felipe 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"** 10 Dec. 2015. Advanced Functional Materials. (Cover Article)

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"** Engineering in Medicine and Biology Society (EMBC), 2015 37th Annual International Conference

Education

University of California Berkeley B.S. Electrical Engineering and Computer Science (EECS);

May 2015; 3.7 GPA

Work Experience

Intern, Northrop Grumman Global Hawk Program — 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.

Software Engineer, Google Inc. — Aug. 2015-present

Developed production code in C++ and Java for the Google Search Engine.

Made changes throughout the search engine infrastructure.

Architected new features related to query understanding.

Helped develop Query Understanding Service streaming RPC API.

Added AutoTranslation Support to Query Understanding

Launched experiments using Google's internal experimentation framework

Skills

Software Dev.:	C/C++, Python, Java, Scheme, SQL, UNIX
Web Dev.:	Django, HTML, CSS, LaTeX
Hardware:	PCB design & fab. with Eagle and SMD
Embedded Dev.:	Bare metal C programming, ATME1 and TI MSP430 microcontrollers
Human Languages:	English (native) Spanish (proficient) Japanese (intermediate)
Artistic & Creative:	Blender 3D Animation, Inkscape Vector Graphics, Gimp, Swing Dance, Photography

Honors

HK1 EECS Honor Society Inductee

SURF Rose Hills Research Fellowship

QUEST Qualcomm Summer Research Fellowship

UC Berkeley Regents' and Chancellor's Scholarship

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

uGSI for EE20 — Spring 2015

Developed homework and exam exercises in collaboration with other GSIs.

Taught discussion and lab sections