

In Hwan Baek

chris.inhwan.baek@gmail.com • <http://www.linkedin.com/in/ibaek>

EDUCATION	University of California, Los Angeles , Los Angeles, California, USA	
	Doctor of Philosophy in Electrical and Computer Engineering	Sep 2016 – Present
	• Advisor: William J. Kaiser	
	Master of Science (M.S.) in Electrical Engineering	Jun 2016
	• Circuits & Embedded Systems track	
	• Cumulative GPA: 3.86 / 4.0	
	• <i>Master's Thesis: "Rapidly Deployable Internet-of-Thing Body Area Network Platform for Medical Devices"</i>	
	Bachelor of Science (B.S.) in Electrical Engineering	Mar 2014
RESEARCH EXPERIENCE	Sensydia Corporation , UCLA	
	Research and Development Engineer	Sep 2017 – Present
	• Developing novel methods to infer patient states.	
	Wireless Health Institute , UCLA	
	Graduate Student Researcher, Electrical Engineering Department	Jan 2015 – 2017
	Research advisor: Professor William Kaiser	
	• Developed Internet-of-Things educational platforms, involving development of sensor interfaces for embedded Linux and robotics platform.	
	• Developed sensor interfaces and sensor fusion algorithms using machine learning.	
	• Implemented a time delay analysis tool and a time synchronization module for multiple signal sources.	
RESEARCH INTERESTS	• Internet-of-Things medical devices	
	• Patient state inference using engineering methods	
	• Biomedical sensors	
TEACHING/ MENTORING EXPERIENCE	Engineering 96 , UCLA	
	Teaching Assistant	Sep 2015 – Dec 2015
	• Guided students during lab sessions.	
	• Developed tutorials on IoT, embedded Linux, sensors, actuators, robotics, etc.	
	• Prepared homework assignments.	
	Electrical Engineering 180D , UCLA	
	Teaching Assistant	Jan 2016 – Jun 2015
	• Provided guidance on projects including mental health IoT system, athletic performance evaluation system, smart wearables, and robotics.	
	• Presented on topics including IoT, embedded Linux, robotics, network, IR communication, 9DOF-based motion sensing, and artificial neural network.	
	• Prepared weekly lab sessions.	
	UCLA Wireless Health Institute Summer Research Program	
	Mentor	Jun 2015 – Aug 2015
	• Provided guidance to four undergraduate scholars for their research program at UCLA.	
	• Presented on topics including IoT, C programming, Linux, and embedded systems.	
	• Lead the undergraduate scholars to design and implement Cloud-based Autonomous Vehicle Control System.	
SKILLS	• Programming: C, C++, Python Java, MATLAB, Android Development, Shell script, Arduino, Prolog, OCaml, Verilog, R, \LaTeX	
	• Operating System: Linux (familiarity with the kernel, internals, etc.), Mac OS X, Windows	
	• Software/CAD tools: Cadence, Xilinx, Eagle, 123D	
ACADEMIC HONORS & AWARDS	Eta Kappa Nu (HKN)	2013 – Present
	UCLA	

Gamma Beta Phi Honors Society

Sep 2010 – Jun 2011

AMATYC Student Mathematics League
Won the first place.

2010

**PROFESSIONAL
AFFILIATIONS
& ACTIVITIES**

Institute of Electrical and Electronics Engineers
Member

2013 – Present

LANGUAGES

Korean: Fluent
English: Fluent

REFERENCES

Professor William Kaiser
Professor of Electrical and Computer Engineering
University of California, Los Angeles
Department of Electrical and Computer Engineering