

NEAL S. JACKSON

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EDUCATION

University of Michigan, Ann Arbor
B.S.E in Computer Engineering
GPA: 3.85

Sept 2012 – May 2016

University of California, Berkeley
Ph.D in Computer Science and Electrical Engineering

August 2016 - Present

PUBLICATIONS

Thomas P Zachariah, Noah Klugman, Bradford Campbell, Joshua Adkins, **Neal Jackson**, Prabal Dutta. The Internet of Things Has a Gateway Problem. In *Proceedings of the 16th Workshop on Mobile Computing Systems and Applications*. HotMobile '15. Santa Fe, New Mexico, USA. February 2015.

POSTERS AND DEMOS

Brad Campbell, **Neal Jackson**, Prabal Dutta. “Generic Access Point: Bridging the GAP between the Swarm and the Cloud”. Talk or presentation, October, 2014; Poster presented at the 2014 TerraSwarm Annual Meeting.

RESEARCH EXPERIENCE

University of Michigan, Ann Arbor and University of California, Berkeley

Undergraduate Research Assistant with Dr. Prabal Dutta

April 2014 – May 2016

- Designed the Generic Access Point (GAP) Beaglebone Black cape, a single unified hardware gateway for IEEE 802.15.4 and Bluetooth Low Energy (BLE) Devices. GAP is a hardware solution to provide internet access for embedded devices.
- Developed the Observer, a sensor node that interfaces with the Beaglebone Black and acts as a standalone battery powered device with a wireless IEEE 802.15.4 radio. The Observer allows resource-constrained devices connected to GAP to supplement their data with ambient environmental data from the Observer.

Graduate Research Assistant with Dr. Prabal Dutta

May 2016 - Present

- Designed key architectural elements and hardware components for the Signpost Project, a network of modular, energy-harvesting sensors that are deployable on street signposts to enable city-scale sensing without requiring the modification or addition of infrastructure. A Signpost provides a modular interface that allows anyone interested in city-wide sensing experiments to deploy sensors without needing to design their own power or communications.

INDUSTRY EXPERIENCE

Intel Corporation; Hillsboro, OR

Internet of Things Software Engineer, Intel Corporation

April 2015 – August 2015

- Researched emerging prototype IoT platforms and cloud services to guide pathfinding decisions.
- Developed an over-the-air BLE firmware update utility for a proof-of-concept cloud-to-device application and pushed to release it as open source software.

TEACHING, SERVICE, AND HONORS

Tau Beta Pi Honor Society; Ann Arbor, MI

Volunteer Tutor, Instructor

- Tutored students in introductory electrical and computer engineering courses.
- Assisted the elderly with repair and operation of their electronic devices.
- Instructed elementary school children in math and physics through the MindSET Program.

April 2014 – Present

University of Michigan, Ann Arbor

University Honors

Earned a 3.5 GPA or greater during a term.

Dec 2012 – May 2016

Dean's List

Earned a 3.5 GPA or greater during a term in the College of Engineering.

Dec 2012 – May 2016

James B. Angell Scholar

Achieved an "A" record for two or more consecutive terms.

March 2014