

Cell: 443-834-5843

DANIEL MIRSKY

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EDUCATION

University of Maryland , College Park, MD	Fall 2010 – Fall 2015
Honors College - Gemstone Program	Overall GPA: 3.78
B.S., Mathematics	Summer 2015
B.S., Electrical Engineering , 1 class remaining	(expected) Fall 2015
Technical University of Denmark , Copenhagen	Spring 2013
Johns Hopkins University , Future Scholars Program - Mathematics	Fall 2009 – Spring 2010

SKILLS

PCB (Eagle, Altium)	Assembly	ARM	I ² C, SPI, RS232
Circuit Layout	C	8051	802.15.4
Sensor Interfaces	Python	TI MSP430, PRUSS	Mesh Networks

WORK EXPERIENCE

OpenAG – MIT Media Lab *Embedded Developer* **August 2015**

Designed and implemented a closed-loop hydroponic control system in Python (alone!)
Implemented threading and profiling to meet soft real-time constraints
Stress-tested system with linux traffic control (tc) and nginx proxy

Synthego *Intern* **Summer - Fall 2014**

Designed, fabbed BeagleBone cape for bio automation equipment (Altium)
Revised stepper motor library to provide additional homing functionality (asm, C, Python)
Expanded and debugged distributed ZeroMQ Beaglebone network (Ansible, bash, Python)

Micro-Robotics Lab - UMD *Research assistant* **Fall 2010 – Spring 2014**

Pioneered a 1.2 cm² robotic platform and network based on the TI CC2533 SOC
Implemented open-source motor, radio, and sensor libraries for robot control
Created an iPad app and server application to control robots over Wi-Fi

iVeia *Intern* **Winter, Summer 2013**

Ported Ubuntu to custom hardware based on TI's OMAP3 ARM SoC
Integrated SELinux+SEAndroid into Android distribution on custom hardware
Demonstrated SELinux security enforcement with custom policies and a simple Java app

Texas Instruments *Intern* **Summer 2012**

Programmed and profiled CC6678 DSP with GSM-AMR codec in cache vs. RAM
Wrote an application note detailing COFF runtime codec relocation with TI's linker in C
Detailed development of an ELF-based solution for runtime relocation

PUBLICATIONS AND PRESENTATIONS

TinyTeRP: A Tiny Terrestrial Robotic Platform with Modular Sensing (Paper)

IEEE International Conference on Robotics and Automation (2013, Germany – Paper)

International Symposium on Distributed Autonomous Robotic Systems (2012, JHU – Poster)

AWARDS AND CERTIFICATION

Linux Kernel Internals Training (K Computing) **Fall 2014**

Advanced High Speed Design Training (Fedlevel Academy) **Fall 2014**

ISR Outstanding Systems Engineering Undergraduate Student Award **Fall 2013 – Spring 2014**

Maryland Summer Scholars Grant Recipient **Summer 2011**

Banneker-Key Scholarship Recipient **Fall 2010 – Spring 2014**

(Lots of) References available upon request