# **BRANDON LESHCHINSKIY**

717-881-0188 BXL5138@psu.edu Honors electrical engineering student seeking full-time employment with a fast-paced, innovative, technology company. Offering hands-on experience with hardware, software, and embedded systems.

**3201 Rex Drive** York, PA 17402

#### **Education**

The Pennsylvania State University, University Park, PA Schreyer Honors College, **3.73/4.00** GPA B.S. in Electrical Engineering Minor in Mathematics

May 2016

May 2015 -

July 2015

# Professional Experience

Electronic Test Development Intern, GE Transportation

- Created hardware-in-the-loop simulation using Atmega328p microcontroller to test Off-Highway Vehicle motor controllers
- Designed wire verification test for locomotive auxiliary inverters
- Updated frequency generation card to accommodate new controls

Co-Founder, Michelangelo Robotic Endoscope Start-up

- Developed path-following algorithm for snake-like surgical device
- Created MATLAB GUI to interface between users and hardware
- Modeled and simulated robot's movement using Simulink

Management Intern, Verizon Communications

- Automated data acquisition with Excel macros, saving \$8oK/year
- Created flowcharts, presentations, and training materials

Present

January 2015-

May 2014 – July 2014

#### Research

Sudoku Radar Research Assistant, Radar and Communications Lab

- Optimized SNR and interference of radar waveforms using MATLAB
- **Submitted for publication** to *IEEE Letters*: "Radar ambiguity functions and resolution characteristics of Sudoku-based waveforms" by Narayanan, Bufler, and Leshchinskiy

## January 2015– Present

## Leadership

Engineering Ambassador, PSU College of Engineering

- Lead **outreach programs** at public schools around PA
- Give weekly tours and recruit students for PSU Engineering

Marketing Director, Apparatus X Disaster Relief Vehicle

- Managed crowd-funding campaign that **exceeded \$15,000**
- Directed outreach to media; worked with Wired, MSNBC, etc.

Math Tutor, Penn State Learning

- Led exam review sessions w/ 100+ students in attendance
- Assisted individuals in learning concepts from calculus I, II

Founder, PSU Absurdity

- Recruited members, promoted club, led meetings
- Planned and performed public, spontaneous entertainment

# April 2014– Present

March 2014 – January 2015

# August 2013 – May 2015

April 2013 – May 2014

# Technical Skills and Languages

## Software:

- Proficient with MATLAB, VBA, SPICE, LabVIEW (CLAD certified)
- Basic knowledge of Java, C++, C, Python

#### Hardware:

- Proficient with AVR, ARM, PIC microcontrollers
- Experienced with oscilloscopes, function generators, soldering

### Languages:

• Proficient in Spanish, Russian; basic knowledge of German