# NICHIN K. SREEKANTASWAMY

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#### **FDUCATION**

University of Pennsylvania, Philadelphia, PA, USA

Master of Science in Engineering, Electrical Engineering, May 2017 GPA: 3.77 / 4.00

Birla Institute of Technology and Science, Pilani – Goa Campus, INDIA

Bachelor of Engineering (Hons.), Electrical and Electronics Engineering, May 2015 GPA: 8.89 / 10.00

### **CURRENT POSITION**

Axon Enterprise Inc., Scottsdale, AZ, USA

Electrical Engineer (Engineering Development Program)

June 2017-Current

Working in Research and Development, focused on building the next generation of body worn cameras for law enforcement officers.

### **PREVIOUS POSITIONS**

The Wharton School, University of Pennsylvania, Philadelphia, PA, USA

Electronics Technical Consultant (Wharton Entrepreneurship)

August 2016-May 2017

School of Engineering and Applied Science, University of Pennsylvania, Philadelphia, PA, USA

Teaching Assistant for the course on Human Factors Engineering

August 2016-May 2017

## **PREVIOUS INTERNSHIPS**

Barn Owl LLC, Colorado Springs, CO, USA

Product Development Lead

June-August 2016

Successfully managed tasks from design and testing to prototype manufacturing of wireless water tank monitoring units. Worked with Low Power Wide Area Networks (LPWAN) enabled by Long Range (Semtech's LoRa) radio modules and a database with a RESTful API interface. Supported in this endeavor by Wharton Entrepreneurship's Startup Internship Award.

Keywords: Altium designer, PCB Fabrication, LoRaWAN, Antenna, Python, Javascript, RaspberryPi, Xbee.

Instituto Superior Tecnico, Lisbon, PORTUGAL

Research Student at DSOR (Dynamical Systems and Ocean Robotics) Laboratory January-June 2015

Developed an economical underwater optical communication system for fast data transmission between marine robots over a range of short distances. Designed and implemented the algorithms for encoding and signal processing on a custom Xilinx Spartan 3E FPGA board.

Keywords: Xilinx System Generator, Manchester Encoding, UART, Data Mule AUV.

California Institute of Technology, Pasadena, CA, USA

Research Fellow at LIGO (Laser Interferometer Gravitational wave Observatory)

June-August 2014

Built an automated frequency response measurement system that allowed lab personnel to remotely acquire transimpedance frequency response graphs of various RF photodetectors without disturbing the interferometer setup. Integrated a network analyzer and several multiplexed photodetectors for wireless data transfer over Wi-Fi. Keywords: Optical Fibers, Photodiodes, Python, GPIB (General Purpose Interface Bus), Network Analyzer.

Indira Gandhi Centre for Atomic Research, Kalpakkam, INDIA

Summer Research Intern at NDE (Non Destructive Evaluation) Laboratory

May-July 2013

Completed the design and implementation of a programmable signal conditioning circuit to aid and improve eddy current testing equipment used for finding manufacturing defects inside materials by removing various types of electrical noises.

Keywords: NI Multisim and Ultiboard, Tunable bandpass filter.

## **PUBLICATION**

Gois P., **Sreekantaswamy N.**, Basavaraju N., Rufino M., Sebastiao L., Botelho J., Gomes J., Pasoal A. (2016). "Development and Validation of Blue Ray, an Optical Modem for the MEDUSA class AUVs", IEEE 3rd Underwater Communications and Networking Conference, La Spezia, ITALY