## **SUNAY BHAT**

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#### **EDUCATION**

**University of Tennessee** 

Knoxville, TN

BS in Electrical and Computer Engineering (Summa Cum Laude)

May 2017

### WORK AND RESEARCH EXPERIENCE

Nano Terra Inc.

Cambridge, MA

Electrical Engineering Intern

June-August 2016

- Designed and constructed multiple prototypes and initial commercial product requiring custom PCB and software design
- Improved product performance benchmarks and data transmission rates by an order of magnitude
- Provided vital assistance, development, and final designs as primary electrical hardware and component engineer to multiple project teams within the company

# Oak Ridge National Laboratory-Manufacturing Demonstration Facility

Oak Ridge, TN

Research Assistant

July-August 2014

- Worked with state of the art 3-D metal and plastic printers along with accompanying software to predict microstructure as a function of thermal cycling
- Assisted research project on graded composition metals printing for many potential applications including streamlining of manufacturing processes

# University of Tennessee, Knoxville

Knoxville, TN

Research Assistant, Part Time – UT Nonwovens Research Laboratory

August 2014-May 2016

- Developed a method to measure the electrical conductivity of high resistivity materials
- Evaluated conductivity of carbon nanotube (CNT) yarns and graphene reinforced polymeric fibers
- Conducted research on sound impedance of various fiber-based composites

Senior Design Project – Team Leader

January 2017-May 2017

- Leading team designing automated robot tour guide of department building
- Completed custom PCB design, Arduino programming, electrical wiring, solder work, and documentation

### LEADERSHIP/COMMUNITY EXPERIENCE

Student Athlete – Tennis (Team Captain from Fall 2015)

August 2013-May 2017

- Balancing full athletic schedule including practice, travel, and competition while completing 14-17 hours of course work each semester
- Team representative for the Student-Athlete Advisory Committee from Fall 2015- Spring 2017
- Contributed over 50 hours of service to the Knoxville Community including work at: Volunteer Ministry Center, Beardsley Community Farm, and Dogwood Elementary School

### HONORS AND AWARDS

- Chancellor's Honors Banquet Citation for Outstanding Scholar Athlete (2017)
- Chancellor's Honors Banquet Citation for Extraordinary Academic Achievement (2017)
- Athletics Board Recognition of Academic Achievement for Achieving a Superior GPA (2017)
- CoSIDA Academic All-District (2017)
- Dean's List College of Engineering every semester in the college (2014-2017)
- Three-time SEC Academic Honor Roll and ITA Scholar Athlete Recognition (2014-2016)
- Two-time Men's Tennis SEC Community Service Team Recognition (2016-2017)
- Recipient of six departmental and college scholarship awards (2015-2017)

#### SKILLS AND SOFTWARE

- Extensive soldering, PCB design and assembly with EAGLE CAD software, and prototyping experience
- Proficient in C++, Python, ARM Assembly Language, Arduino IDE, MATLAB, and VHDL
- Laboratory experience with Keyence microscopes, plastic and metal 3-D printers (plus accompanying software), microscope sample prep equipment, etc.