Ashish **Nichanametla**

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Education

University of Michigan
Junior | BSE in Computer Engineering
Expected May 2018 | Ann Arbor, MI
Cum. GPA: 3.8/4.0 | Dean's List: Fall 2014, Winter 2015, Fall 2016

Experience

General Electric (GE)
May 2016 – August 2016 | Van Buren, MI
Worked for GE Digital and GE Global Research at Digital Thread Hub formerly known as Advance Manufacturing Science and Technology Center
- Worked in the Brilliant Factory Lab to help develop GE's push for Brilliant Manufacturing. Goal is to develop an intelligent factory where manufacturing is fully automated and sensor enabled.
- Performed data analytics using NI Compact Data Acquisition on CNC machine. Helped integrate Renishaw Equator, an intelligent comparator robot, into test process. Helped develop Pilz Safety Eye, a 3D zone monitoring system. Assisted in developing a fully automated model train to demonstrate Brilliant Manufacturing concept

Michigan Autonomous Aerial Vehicles (MAAV)
September 2014 – Present | Ann Arbor, MI
MAAV is an engineering design team that builds drones for the International Aerial Robotics Competition.
- Designed system architecture and board layout for logic module which served as a breakout board for the TI Tiva Microcontroller. Designed header and receptacle packages on Soft Eagle which will connect the logic module to other modules.
- Assisted in the design of LED circuit board that sits atop the spine board. The LED circuit board is a 360 degrees circular board with 80 LEDs that is intended to receive data from the drone based on its flight path and indicate the direction on the led board. Implemented drivers for basic led functionality.

Miniature Tether Electrodynamics Experiment (MiTEE)
January 2016 – August 2016 | Ann Arbor, MI
MiTEE is a space systems design team that builds a small satellite known as a Cube Sat that can take various atmospheric measurements.
- Learned embedded design using Altium designer. Studied communication protocols implemented on the various circuit boards including I2C, UART, and SPI.
- Worked on driver functions for SD card implementation using TI Code Composer Studio

Galco Industrial Electronics
May 2015 – August 2015 | Madison Heights, MI
- Handled various electronic parts including AC and DC drives, circuit boards, and small components as well as managed their inventory.
- Shadowed field service technicians as they received faulty or defective parts and repaired them. Learned about circuit board debugging techniques as well as board analysis.
- Performed simple tasks related to and learned some theory behind warehouse management.

Data Analyst for Biomedical Research
September 2014 – April 2015 | Ann Arbor, MI
- Worked in Michigan Center for Translational Pathology and investigated metabolite markers that can be used for the early detection of prostate cancer.
- Performed statistical analysis as well as worked with computer software to generate correlation between concentration of metabolite and stage of prostate cancer.

Coursework

Data Structures and Algorithms, Microprocessor Based Systems, Computer Architecture, Signals and Systems

Skills

CAD Software
Soft Eagle, Altium PCB Designer, AutoCad

Programming Languages
C++, C, Python, Matlab, LateX, HTML, CSS