Devesh Mohan

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Seeking full-time employment (40+ hrs) for Fall 2018, or internships for Summer 2018

Education

Iowa State University | Ames, Iowa
Aug 2013 – Present
B.S. Electrical Engineering (Emphasis in VLSI)
GPA: 2.53/4.00
Class Standing: **Senior**
Expected Graduation: May 2018

Grenoble Institute of Technology | Grenoble, France
Summer 2015
Nanotechnology Program
Topics covered: Micro/Nano Electronics, Nanobiology, Materials Engineering, Nanophysics, Solar Cell Fabrication in Clean Room Environment

Awards and Achievements

1. HackRice hackathon 2017
- Best Design and Best Use of Microsoft Azure for Good
2. $1,000 Innovation Pitch Competition 2017 - Wasabi Farming in Iowa
- Best Agricultural Venture
3. Academic Achievement Award 2013

Skills and Interests

Programming Languages
Python, C/C++, Matlab, Java, Web Development (HTML5/CSS), Javascript, NodeJS, Robot Operating System

Electrical Simulation
PSpice, Cadence Virtuoso, Signal Express, Verilog, ModelSim

Mechanical/Design
SketchUp, Autocad

Laboratory Techniques
Titration and Rinsing, Fluorescence Spectroscopy, Gold Sputtering Deposition, Basic Signal Processing, Soldering

Language Skills
English, Hindi, French (Elementary proficiency)

Electrical Experience

SmartAg LLC, Ames, IA | *July 2017 – Aug 2017*
Electrical / Software Engineering Intern
Transitioned all autonomous tractor hardware from Powershift to IVT tractor. Tested Raspberry Pi and Arduino controls systems. Programmed PID controls and steering on IVT tractor. Built interface to visualize tractor CAN data and field tested tractors.

Teaching Assistant – Electrical Circuits (EE 201) | *Jan 2016 – May 2016*
TA under Dr. Gary Tuttle. Responsibilities included conducting lab sessions covering basics of circuit building, testing, and analysis; and grading for class. ~10 hours per week.

LASER Electrical Eng Member, Aerospace Eng. Research | *Sept 2014 – May 2015*
Member of LASER (Light Aircraft Solar Extended Range) Team working on battery optimization, chip programming, and avionics using Ardupilot and Arduino platforms.

Research Experience

Self-Designed Research Project | *Nov 2016 – April 2017*
Feasibility study titled, "Addressing food shortages through vertical farming and efficient microgrid design." This study determines if cost savings in vertical farming can be found in solar energy for regions where food is hard to grow or import costs are high.
- Poster presentation at National Conf on Undergrad Research (NCUR) 2017, Memphis
- NSF Grantee for poster presentation at UPitt Mascaro Sustainable Eng Conference

Laboratory of Integrated Optical Sensors (LIOS), ISU | *May 2016 – Dec 2016*
Undergraduate Research Assistant, Adviser - Dr Meng Lu
Principal-investigator for study titled, "Water Quality Study for Microcystin Detection using Colorimetric Gold Nanoparticles," to detect the presence of Microcystin-LR toxin in drinking water. Tested 100+ toxin-nanoparticle concentration variations.
- Oral presentation at National Conf on Undergrad Research (NCUR) 2017, Memphis

GIANT Internship at Laboratory in Materials Science and Physical Engineering (LMGP), Grenoble, France | May 2015 – July 2015
Undergraduate Research Intern
Research internship for study titled, "DNA Grafting on Nanowires," to quantify the amount of DNA deposited on Si/ZnO nanowires and perfect procedure to improve reproducibility. Intended result to be used to build biosensor device for disease detection.
- Oral presentation at ISU Undergraduate Research Symposium 2016

Computer Science Experience

Amazon Alexa Skill Development - University Challenge Diploma | *Aug 2017*
1. Nutrition Hub - report nutritional information about raw, cooked, and branded food
2. EventHub - report music and sports events for artist/sports team or location-specific
   Usage stats: combined over 50 unique users and over 200 user utterances

The Boeing Company, Huntington Beach, CA| *May 2014 – Sept 2014*
IT Intern - Systems Engineering / Project Management
IT internship under Network Segmentation team, controlling internal network policy. Created and reviewed engineering specification documents to be used in data centers, ran monthly RIO (Risk, Issue, and Opportunity) Board meeting, and facilitated a team of interns in the Wearable Technology Group for tablet/wearable use at airline crash sites.

Hackathons

HackMIT 2017- Microsoft Hololens development
HackRice 2017 - Hurricane Harvey track - http://shelterize.net - emergency shelters
Winner - 1. Best Design Project, 2. Best Microsoft Azure Use for Good
HackUTA 2017 - Microsoft Kinect security camera using Python and OpenCV