Devesh Mohan

https://deveshmohan.github.io/

dmohan@iastate.edu
(703) 609-6749
3108 West Street, Ames IA 50014

Seeking full-time employment

Education

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

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

Hackathons

HackMIT 2017- Hololens development
HackRice 2017 - Hurricane Harvey track - shelterize.net
Winner - 1) Best Design Project, 2) Best Microsoft Azure Use for Good

Skills and Interests

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

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

Mechanical:
Robot Operating System, Autocad

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

Language Skills
English, Hindi, French (Elementary proficiency)

Summer Work Experience

SmartAg LLC, Ames, IA | *July 2017 – Aug 2017, contracted for Spring 2018 part-time*
Electrical / Software Engineering Intern
Transitioned all autonomous tractor hardware from Powershift to IVT tractor. Tested Raspberry Pi and Arduino controls systems. Programmed controls and steering on IVT tractor.

Laboratory of Integrated Optical Sensors (LIOS), Iowa State Univ, IA | *May 2016 – Dec 2016*
Undergraduate Research Assistant
Principal-investigator for project under Dr. Meng Lu titled, "Water Quality Study for Microcystin Detection using Colorimetric Gold Nanoparticles," to detect the presence of Microcystin-LR toxin in drinking water to produce a color based assessment of quality. Intended result to be used to produce a quick, cheap and portable device in accompaniment with a phone application.
Oral presentation at National Conference on Undergraduate 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 under Dr. Celine Ternon 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

The Boeing Company, Huntington Beach, CA| *May 2014 – Sept 2014*
IT Intern – Systems Engineering / Project Management
IT internship as member of Network Segmentation team responsible for improving the security, responsiveness, and capability of the Boeing global network. 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 Computing Technology Group to develop technologies for an airline crash site.

University Research and Work Experience

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: over 50 unique users and over 100 user utterances

Winner of $1,000 Innovation Pitch Competition - Agricultural Technology | *April 2017*
Winning pitch for wasabi farming in Iowa, addressing world food shortages of high-quality wasabi production through climate-controlled greenhouses.

Self-Designed Research Project | *Nov 2016 – April 2017*
Feasibility study titled, "Addressing food shortages through vertical farming and efficient microgrid design," aims to tackle the problems of food shortages and high food prices in regions that are either incapable of producing food, or, where the cost of produce can be lowered. This study determines if cost savings in vertical farming can be found in solar energy.
Poster presentation at National Conference on Undergraduate Research (NCUR) 2017, Memphis
NSF Grantee for poster presentation at UPitt Mascaro Sustainable Engineering Conference 2017

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

LASER Electrical Engineering Team 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.