# ignesh Gopal

vvgopal2@illinois.edu | (732) 429-5387 14 Paddock Drive, Plainsboro, NJ 08536

## **EDUCATION**

## **UNIVERSITY OF ILLINOIS** AT URBANA CHAMPAIGN

**Expected Graduation Date:** May 2019

## **BS DOUBLE MAJOR IN ELECTRICAL ENGINEERING AND ENGINEERING PHYSICS**

College of Engineering James Scholar Program Deans List

Cum. GPA: 3.75 / 4.0

## WEST WINDSOR-PLAINSBORO HIGH SCHOOL SOUTH

Grad. June 2015 | Plainsboro, NJ

## LINKS

LinkedIn://vigneshgopal Personal Website:// vigneshgopal.me GitHub://vigneshgopal

# COURSEWORK

Digital Circuit Design IC Device Theory and Fabrication Semiconductor Electronics Fields and Waves I & II Analog Systems and Signal Processing Quantum Mechanics I & II Linear Algebra Differential Equations Plus Relativity and Math Applications

# SKILLS

## **PROGRAMMING**

#### Proficient:

Python

C

Verilog **MATLAB** 

MFX

### Familiar:

Unity

OpenCV

C.#

Java

Javascript

## RESEARCH

## INNOVATIVE COMPOUND SEMICONDUCTOR (ICOR) LABORATORY | Undergraduate Research Assistant

Jan 2016 - Present | Urbana, IL

- Worked under Professor Can Bayram for research in next generation transistor devices.
- Responsible for creating flexible piezo-GaN samples for uses in flexible transistor and LED devices.
- Experience with procedures such as substrate removal through dry and wet etching (ICP and HF), hall measurements, and MOCVD

## PRINCETON UNIVERSITY - THOMPSON LAB | UNDERGRADUATE RESEARCH INTERN

June 2016 - August 2016 | Princeton, NJ

- Worked under professor Jeff Thompson to develop methods of isolating individual Er ions in controlled quantum states for applications in quantum computing and information.
- Developed a method of controlling the specific quantum state of a trapped ion in a diamond lattice using a perfectly linear laser sweep that was calibrated to the sub-picometer level.
- Created a high response PID controller using an FPGA on a Red Pitaya Board for use in controlling laser power output

# EXPERIENCE AND PROJECTS

## **OTCR CONSULTING | CONSULTANT**

September 2015 - Present | Urbana, Illinois

- Chosen as one of 10 Freshman from a competitive pool of over 300 applicants for top consulting group on campus dealing with clients ranging from Non-Profits to Fortune 500s
- Worked with a wide host of clients including a start-up dealing with real time location services as well as a private school in Chicago

## **SPARTAHACKS** | Assistive object identification for the visually **IMPAIRED**

February 2016 | Lansing, MI

- Awarded best use of Clarafai API and for best use of Microsoft Technology competing against 1000+ teams
- Created an object identification device that could detect where objects were in relation to the user using
- One of the first people ever to interface Microsoft Kinect 2 with a Mac

# AWARDS

2016	National	Best use of Spartafai API (Against 1000+ people)
2016	National	Honorable Mention for Best Use of Microsoft Technology
2016	University	James Scholar Honors Program (3.5+ GPA)
2016	University	Dean's List (Top 20% of class)
2015	University	University Achievement Scholarship
2015	National	Thomas J Watson Scholarship Recipient (One in 100 out of 2

2500+)