

# Karan Shah

[karan.shah04050@gmail.com](mailto:karan.shah04050@gmail.com) | Cell Phone: (224) 307-6402 | 10467 White Rose Lane, San Diego, CA 92127

<https://www.linkedin.com/in/karan-shah/> | <https://kks3851.github.io>

---

## PROFESSIONAL EXPERIENCE

### Merlin Solar Technologies, USA *Engineering Intern*

Jun 2017 – Sept 2017

- Developed a system for transferring data from solar modules and remotely sending it to user.
- Assembled and designed data logging product for real time visualization of voltage and current.
- Worked in a team of 4, for designing a LabVIEW project that plots real time data from DC Electronic Load.

### Emerson Network Power, India *Trainee Intern*

Jun 2015 - Jul 2015

- Studied and examined various components used in UPS, DC power System and AC power System.
- Carried out different tests for UPS and DC power unit.
- Accomplished the task of checking the connections in different power systems.

### Omicron Sensing Pvt. Ltd, India *Trainee Engineer*

Nov 2014 - May 2015

- Accomplished the task of testing and debugging various products used in communications.
  - Manufactured PCB layout for communication system containing components such as Wi-Fi, GSM, ZigBee etc.
  - Managed a team of 8 people for developing low cost modules and marketed the product for the company.
- 

## PROJECTS

### Switched Capacitor DC-DC Converter

Sept 2017 – Dec 2017

- Designed a 2:1 voltage regulator with 2 phases.
- Used a reference paper to finalize the circuit and tested their goal
- Used Cadence Virtuoso to design the circuit and implemented the same.

### Image Mosaic

Sept 2017 – Dec 2017

- Designed a MATLAB code for stitching images.
- The function matches the features in different images and stitches them together
- The stitched images are then blended together to form a panorama

### Personalized Display Frame

Jan 2017 – Jun 2017

- Developed an embedded system that displays personal information of the user such as pictures and calendar.
  - Designed the database for connecting the system to user's phone
  - Accomplished the task of designing the webpage along with the hardware connections between different components.
- 

## COURSES

**Graduate Courses:** Internet Security, Biometrics, Design and Analysis of Algorithm, Microprocessor System Design – 1, Engineering System Design – 1, Digital Filtering, Microprocessor System Design – 2, Embedded System Design and Synthesis, Internet of Things, Engineering System Design – 2, Introduction to Computer Vision, Advanced Low Power Digital and Mixed Signal Circuit Design.

---

## TECHNICAL SKILLS

**Programming Languages:** C, C++, Python, Embedded C, HTML, CSS

**Simulation Software:** MATLAB, AutoCAD, OrCAD, Xilinx, Model SIM, LT Spice IV, Cisco Packet Tracer, Proteus, Microwind 3, Eagle 7.7, Cadence Virtuoso

---

## EDUCATION

### Northwestern University, Evanston, IL

Dec 2017

*Master of Science in Computer Engineering*

*CGPA : 3.7*

### D. J. Sanghvi College of Engineering- Mumbai University, India

May 2016

*Bachelor of Electronics & Telecommunication Engineering*

*CGPA : 8.39*