

# Kiran Shila

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## EDUCATION

### UNIVERSITY OF SOUTH FLORIDA

**MS ELECTRICAL ENGINEERING**  
College of Engineering  
August 2019 | Tampa, FL

**BS ELECTRICAL ENGINEERING**  
College of Engineering  
May 2018 | Tampa, FL

**MINOR IN COMPUTER SCIENCE**  
College of Engineering  
May 2018 | Tampa, FL

Dean's List (All Semesters)  
GPA: 4.0 / 4.0

## COURSEWORK

Antenna Theory  
Active and Passive RF Design  
Digital CMOS Design  
MMIC Design  
Power Amplifier Design  
Numerical PDE  
Signals and Systems  
Computer Organization  
Electronic Materials  
Electromagnetics  
Microprocessors  
Linear Algebra

## SKILLS

### PROGRAMMING

Fluent:  
C++ • C • MatLab •  
L<sup>A</sup>T<sub>E</sub>X • Julia • Python  
Familiar:  
Java • Lisp • VHDL

### DESIGN

Fluent:  
Keysight ADS • Ansys HFSS •  
SOLIDWORKS • AutoCAD  
Familiar:  
Microwave Office • LabVIEW

## CERTIFICATIONS AND TRAINING

- Cleanroom
- 3D Printers
- Laser Cutters
- Keysight RF Microwave Industry-Ready Student Certification

## EXPERIENCE

### MITRE CORPORATION | RF LAB INTERN

October 2017 – Present | Tampa, FL

- Developed solutions to mitigate systems-level design errors
- Designed, programmed, and prototyped embedded systems for wireless communication and power system efforts

### CALTECH | RESEARCH TECHNICIAN ASSISTANT

May 2018 – August 2018 | Pasadena, CA

- Designed cryogenic low noise amplifiers for radio astronomy
- Assisted in the planning and system design for next generation radio telescopes

### NASA GODDARD SPACE FLIGHT CENTER | STUDENT TRAINEE

January 2016 – June 2019 | Greenbelt, MD

- Assisted designing and testing of RF measurement equipment for earth science
- Developed software to automate measurements and data processing
- Designed models for mm-Wave devices and systems

## RESEARCH

### UNIVERSITY OF SOUTH FLORIDA

### ELECTRICAL ENGINEERING | RESEARCH ASSISTANT

August 2014 – Present | Tampa, FL

- Developed novel additively-manufactured 38 GHz antenna array for MIMO-capable 5G communications
- Manufactured mm-wave circuits and antennas with additive manufacturing and photolithography
- Tested and verified RF/Microwave components and systems

## DESIGN PROJECTS

- Programmed firmware for mil-spec power management system
- Designed a 36 element patch antenna array for Ku Band Radar
- Designed and built 2.5 GHz Class-F Power Amplifier
- Designed, built, and tested a 4-6 GHz 1W FMCW Through Wall Imaging Radar
- Designed 680 GHz micromachined waveguide bandpass filter for space-qualified hardware
- Developed equivalent models for mm-wave noise source diodes

## AWARDS

- 2018 Honors College Graduate
- 2018 King O'Neal Scholar (4.0 GPA)
- 2018 Outstanding EE Graduate
- 2017 Rudy Henning Award for Excellence in Wireless and Microwave Studies
- 2014 USF Research Scholars Award
- 2013 Eagle Scout

## SOCIETIES

- 2014 X-Labs Engineering Club
- 2014 IEEE / MTT-S / APS