# **Alish Kanani**

Pre-final Year (B.Tech)
Electrical Engineering
Indian Institute of Technology (IIT) Jodhpur

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### Education

**B.Tech** - **Electrical Engineering** IIT Jodhpur

Expected 2021

CGPA: 8.75/10 (Till 5th Semester)

Higher Secondary (HSC) Ashadeep Science Bhavan 2017 | Surat, Gujrat Percentage: 94.4%

Secondary (SSC)

M N J Patel High School 2015 | Surat, Gujrat Percentage: 87.66%

### **Relevant Courses**

#### **Electrical Core**

Digital Logic and Design Microprocessors and Microcontrollers

Analog Electronics
Power Electronics
Circuit Theory
Communication Systems
Signals and Systems
Electrical Machine
Power System
Electromagnetic Theory
Physics of Semiconductor Device
Digital Signal Processing\*
Control Systems\*
(\* Ongoing courses)

### **Fundamental Mathematics**

Real Analysis and Linear Algebra Complex Analysis and Differential Equations Probability and Statistics

### **Skills**

### Language

С

Python (Basic) MATLAB

HDL

Verilog

Software Xilinx (ISE)

Synopsys DC (Basic)

Simulink Octave Arduino

Energia

Photoshop (Basic)

### Internship

Accuracy Configurable Arithmetic Circuit | IIT Ropar

Research Intern | May 2019 - July 2019 | Guide: Dr Neeraj Goel

- Studied various existing approximate binary adders and multipliers
- Proposed An Accuracy Configurable Adder and helped in An Accuracy-Configurable Rounding-Based Multiplier
- Submitted two papers in The IEEE International Symposium on Circuits and Systems (ISCAS), 2020

## **Projects**

**DHVANIK - Wearable Tympanometric Diagnostic Tool for Middle Ear Ailments** 

Inter IIT Project | Sep 2019 - Dec 2019 | Guide: Dr Arpit Khandelwal

- Developed a low-cost, user-friendly, IoT enabled, head-phone sized tympanometer that detects middle ear problem
- Made business model for IICDC 2019 and Inter IIT 2019

#### **Optimisation of 32 bit adders**

B.Tech Project | Jan 2019 - Apr 2019 | Guide: Dr S. P. Tiwari

- Studied six different algorithms to add two binary numbers
- Compared delay, area and power of these algorithms in Xilinx-ise
- Project report and code: github.com/AlishKanani/32bitAdders/

#### **AES Data Encryption on FPGA**

Gymkhana Project | Sep 2018 - May 2019

- The aim of the project was to develop an FPGA based encryption engine to facilitate massive data encryption and decryption.
- Project link: github.com/AlishKanani/AES/

**NETRA- Indoor Navigator for Visually Impaired** 

Texas Instruments IICDC Competition | Aug 2018 - May 2019

- Applied dead reckoning for indoor navigation without expensive infrastructure.
- Implemented on Beaglebone black using 9 axis IMU
- Audio and haptic feedback for navigation especially for the visually impaired

## Positions of Responsibility

CAPTAIN Electronics Club | Aug 2018 - May 2019

 Coordinated and managed year round activities and finance of the Electronics Club at IIT Jodhpur

STUDENT GUIDE Counselling Service | Aug 2018 - May 2019

 Mentored freshmen students as a Student Guide for their smooth transitioning into college/hostel life.

### **Achievements**

- Secured Bronze medal in Inter IIT Techmeet 2019
- Led the team of project NETRA and reached semi-finals of DST and Texas Instruments IICDC 2018 among 10,146 teams comprising of 26511 students from 1760 colleges
- Won First Place in the Analog Designs an online contest by **Texas Instruments University Program.**
- Placed among the top 0.5% of 1.4 million applicants in JEE Advanced 2017