

# Debarpan Bose

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D.O.B - 12.05.1994

Nationality - Indian



## EDUCATION

### HOCHSCHULE BREMERHAVEN

MS IN EMBEDDED SYSTEMS DESIGN

Bremerhaven Germany

Current GPA - 1.9

### NITMAS

B.TECH IN ELECTRONICS AND COMMUNICATION ENGINEERING

Grad. Aug 2016 | Kolkata, India

DGPA - 7.87 / 10.0

### VIVEKANANDA MISSION SCH.

Grad. May 2012 | Kolkata, India

## LINKS

LinkedIn://dbose94

Xing://debarpan.bose

Quora://Debarpan-Bose-1

## COURSEWORK

Implementation of SPI protocol(state machine), Traffic Light Controller using Timed State Machine, Design of IP block and softcore FIR filter on FPGA, IIR and FIR filter design and calculation using MATLAB/Simulink, Filter design for an ECG signal, Implementation of FFT algorithm in Java on FPGA, Distance calculation by Acceleration sensor of a building using Atmega32 and processing the data in Matlab

## SKILLS

### PROGRAMMING

#### LANGUAGES

Java • C • Matlab • VHDL • Web Applications(Servlets, XML)

#### MARKUP

L<sup>A</sup>T<sub>E</sub>X • HTML

#### TOOLS

Eclipse • Matlab/Simulink • Xilinx Vivado • Arduino IDE Proteus • LTSpice

#### PROTOCOLS

SPI • I<sup>2</sup>C

#### FAMILIAR

Android • Spring Framework • MySQL • Apache Maven

## EXPERIENCE

### BIBA | STUDENT RESEARCH ASSISTANT

Mar. 2018 – Present | Bremen Germany

Agile Virtual Testing - Harmonization of Test Environments for the purpose of optimizing the functional testing of aircraft functions using Java based web API

## TRAINING

### EASTERN RAILWAYS

Jun. 2015 – Jul. 2015 | Kolkata, India

Training to build and repair Public Amenities Systems(audio and visual) modules used in passenger trains and GPS based digital clocks used in railway platforms

### BHARAT SANCHAR NIGAM LIMITED

Dec. 2014 – Jan. 2015 | Kolkata, India

Knowledge on Switching, Signaling and Routing and hands on training was given on OFC and GSM

## PROJECTS

### FLIGHT ANGLE CONTROL

• Reduced offset by calibrating the MEMS sensor to analyze the time domain signal with disturbance and hence performed FFT to eliminate the noise using different filtering techniques.

• PID controller was programmed for auto leveling of the quadcopter and compared between KALMAN and COMPLEMENTARY filtering technique used for our system using MATLAB.

Hardware: Arduino Mega 2560

Programming/Tools: Arduino IDE, Tera Term, MATLAB, C

### MICROCONTROLLER BASED FUNCTION GENERATOR

• Generated square, sine and triangular wave-forms using a crystal oscillator with a precise frequency, providing high flexibility and reducing cost and circuit complexity used in typical function generators.

Hardware: AT89C51

Programming/Tools: Proteus, C

## LANGUAGES

English: Fluent(IELTS - 7.5)

German: Negotiable(Deutsch A2 level Proficiency)

Bengali: Mother Tongue

Hindi: Proficient