SATYAJEET DESHMUKH

GitHub.com/SatyajeetDeshmukh
(+91)7263942220 ee170002042@iiti.ac.in

EDUCATION

Indian Institute of Technology Indore *July 2017 - Present*
Junior Undergraduate (3rd Year) Overall CPI: 8.48/10
Department of Electrical Engineering (upto 5th Semester)

SKILLS

Electrical: Analog, Digital, Power Electronics, PCB Design, Lab Hardware Testing
Programming: DS and Algorithms, C, C++, Python, Matlab, Git
Other: Web Design, Bash, LaTeX, German, Basic Finance

EXPERIENCE

All Project Files are available on GitHub.

Power Electronics PCB Design March 2019 - August 2019
Summer Project under Dr. Amod Umarikar *IIT Indore*

· Deployed a closed-loop three mode (Buck, Boost, Buck-Boost) SMPS of rating 100 watt which used a PI controller.
· Involved use of simulation tools and then final hardware testing after build completion.

Object Tracking May-June 2018
Part of Robocon 2018 *IIT Indore*

· Program to track the position of the ball and give a trail as well as estimate the distance of the ball from webcam using given focal length.

Transmission Lines Matlab GUI April 2019
Course Project under Dr. Saptarshi Ghosh *IIT Indore*

· Made a GUI for plotting voltage as a function of time and space in Matlab based on theoretical model of transmission lines.

Simulation of BMS August 2018
Round 1 of Shell Eco-marathon *IIT Indore*

· A simple simulation of a Battery Management System using Matlab and Simulink models.

Signals and Systems Frequency Analysis in Matlab April 2019
Course Project under Dr. Ram Bilas Pachori *IIT Indore*

· A simple Matlab signal processing project involving use of FFT and filter design.

TECHNICAL INTERESTS

· Power Electronics
· Control Theory
· Embedded Systems

ACADEMIC RECORD

- Ranked 3770 among 160 thousand students in JEE Advanced 2017 who were eligible from 1.2 million students who took the JEE Main.
- Scored 83.38% in 12th HSC in 2017 and 91.80% in 10th SSC in 2015, both Maharashtra state boards.

RELEVANT COURSES TAKEN

Core Courses
Electronic Devices
Power Electronics
Signals and Systems
Analog Circuits
VLSI Systems & Technology
Microprocessors & Digital Systems Design
Control Systems*
Digital Signal Processing*
Digital Communications*
Power Systems*

Math Courses
Real Analysis
Linear Algebra and Differential Equations I
Complex Analysis and Differential Equations II
Numerical Methods
Probability and Random Processes

* ongoing