# Samrat Sagardeep Ghosh

(+91) 9804-216218 ssdeep.ghosh8@gmail.com GitHub: Samrat-Sagardeep-Ghosh LinkedIn: ssdeep1010

## CAREER OBJECTIVE

To obtain an internship or job working with experienced engineers, that will utilize my design and programming skills.

#### **EDUCATION**

M. Tech. in Power Electronics & Drives, National Institute of Technology Delhi   8.27 CGPA 1st year	2021 – Ongoing
B. Tech. in Electrical Engineering, Techno India, Salt Lake under MAKAUT University   8.08 CGPA	2015 – 2019
XII(Senior Secondary) – CBSE Board, Kendriya Vidyalaya Cossipore   84.8 %	2014
X(Secondary) – CBSE Board, Kendriya Vidyalaya Cossipore   9.6 CGPA	2012

# **PROJECT & TECHNICAL EXPERIENCE**

# INTERNSHIP: MITSUBHISHIPLC (QSERIES) & HMI (GSSERIES)

- Introduction to PLC, Ladder Diagram
- Functional Block Diagram (FDB)
- Human Machine Interface (HMI)
- Industrial Project on Car Parking Management System

# INTERNSHIP: EASTERN RAILWAY (SEALDAH DIVISION)

- · Types of Generation Mechanisms in Trains
- Types of Coaches
- · Power Scheme of Rajdhani
- Power Scheme of Non-AC Coaches
- Sealdah Power House HT and LT Schemes

#### PROJECT: CAR PARKING MANAGEMENT SYSTEM

Automatic Car Parking System using GX Works 2

## PROJECT: REGENERATIVE BREAKING IN DC MOTOR USING CHOPPER

Regenerative Breaking of DC motor Four Quadrant DC chopper Drive using PI Controller in MATLAB

## PROJECT: DESIGNING DIFFERENT CONVERTERS IN SIMULINK

- Finding the  $L_{crit}$  and  $C_{crit}$  values
- Making the state space representation
- Modeling the converters based on state space representation in simulink
- · Converters designed: Buck, Boost and Buck-Boost

## PROJECT: MPPT OF PV USING TRADATINAL MPPT, PI AND BACKSTEPING CONTROLLER

- MPPT of PV using tradational P&O
- MPPT of PV using P&O to find the  $v_{ref}$  for the PI and using that  $v_{ref}$  to generate control signal for the switch via PI controller
- MPPT of PV using P&O to find the  $v_{ref}$  for the PI and using that  $v_{ref}$  to generate control signal for the switch via non-linear backstepping controller

# **CERTIFICATES**

Basics of C++ with Data Structures and Algorithms, Coding Ninjas

Feb 2022 - Sep 2022

Master Program in Cyber Security, Simplilearn with EC-Council & MIT Schwarzman College of Computing Faculty Development Programme on "Modern Trends in Manufacturing Processes and Control Techniques in Renewable

Aug 2021 - Jan 2022

Energy System", Department of Mechanical Engineering, National Institute of Technology Delhi

16 Nov 2021 - 21 Nov 2021

Prime Minister's Scheme under Nation Defence, Prime Minister of India, Narendra Modi

2015 - 2019

## SKILLS

**Tools and Languages** C, C++, WordPress **Quantitative Research** MATLAB, Proteus, PSpice Communication English, Hindi, Bengali

#### ACTIVITIES

IEEE PIICON 2022 Web Page Designing IEEE NIT Delhi Coordinator IEEE NIT Delhi Volunteer (Web Developer) IEEE NIT Delhi Web Page Designing

Feb 2022 – Present

Oct 2021 - Present

Sep 2021 - Present

Nov 2021 - Feb 2022