

SWAPNESH KHAMARU

B.E.AEIE(BU)'22 | M.Tech EE(NITS)'24

LinkedIn: in/swapneshkhamaru/

CGPA: 7.08 (Upto 2nd Semester)

Email: swapnesh_pg_22@ee.nits.ac.in

Mobile: +91-62907-13553

DOB: 01, Aug, 1999

Languages known: Bengali(Native), English, Hindi

EDUCATION

- National Institute of Technology Silchar** Assam, India
Master of Technology -Electrical Engg.(Control and Industrial Automation); CGPA: 7.08 September 2022 - May 2024
- University Institute of Technology, The University of Burdwan** West Bengal, India
Bachelor of Engineering -Applied Electronics and Instrumentation Engineering; CGPA: 8.43 July 2018 - August 2022
- Chandernagore Kanailal Vidyamandir** West Bengal, India
HSC ; Percentage: 85.40 July 2016 - June 2018
- Chandernagore Kanailal Vidyamandir** West Bengal, India
SSC ; Percentage: 92.85 July 2006 - May 2016

INTERNSHIP EXPERIENCE

- Continental Automotive (India) Pvt. Ltd.** Onsite
M.Tech Project Intern (10 Months) Supervisor: Ms. Veena Gujjar July 2023 - May 2024
 - Title of the project:** Development on Hydraulic Actuator based Braking Systems
 - Responsibility:** Writing test specification and unit test cases for MBD project
 - Learning:** Smart-GIT, CATCH, HEP, PloySpace and Continuing...
 - Contribution:** Will be updated as Project advances
- GNSS Laboratory; Department of Physics; The University of Burdwan** Onsite
Project Intern (3 Months) Mentor Dr. Anindya Bose December 2021 - February 2022
 - Title of the project:** Design and Development of GNSS Data logger System
 - Responsibility:** Design a Low Cost Data logger System for Agricultural Project with market available micro-controllers
 - Learning:** Data logger System Design, Different microcontrollers, Communication Protocols, Some GNSS Antennas
 - Contribution:** Storing the logged data of a specific time
- Mejia Thermal Power Station; Damodar Valley Corporation DVC** Onsite
Vocational Trainee (15 Days) [Control and Instrumentation: Plant Unit 7 and 8] December 2019 - January 2020
 - Title of the project:** Uses of Transducer in the field of Control and Instrumentation
 - Learning:** Understanding of Basic Process Plant, Working of the Plant, Sensors and Transducers and the Instrumentation Systems of the Plant

PROJECTS

- M.Tech Thesis Project Work** Onsite
Final Year(Full-time) Supervisors: Dr. Avadh Pati, Dr. Nabanita Adhikary, Ms. Veena Gujjar May 2023 - May 2024
 - Thesis Title:** "Development of Sliding Mode Controller (SMC) based Antilock Braking System (ABS)"
 - Sliding Mode Controller (SMC) based Antilock Braking System (ABS) Development
- B.E. Major Project II** Onsite
8th Semester(Full-time) Guide: Dr. Apurba Ghosh February 2022 - June 2022
 - Thesis Title:** "Compact, Cost-efficient GNSS Data Logger Design and Development"
 - The intent was to make a cost efficient data logger by using some market-available micro-controllers such as Arduino Uno, Raspberry Pi and ESP 32 and compare their effectiveness with the logged data.
- B.E. Major Project I** Onsite
7th Semester(Full-time) Guide: Dr. Apurba Ghosh September 2021 - January 2022
 - Topic:** "GNSS and Its Application in location detection"
 - The intent was to make a Cost-efficient GNSS positioning system with Raspberry Pi 0 and locate the accurate position of an object with the help of U-blox NEO-6M GPS Data Acquisition Module.
- B.E. Minor Project** Hybrid
6th Semester(Full-time) Guide: Dr. Apurba Ghosh May 2021 - August 2021
 - Topic:** "Home Automation Using IOT, Smart Induction Oven Model"
 - The goal was to make a cost efficient Induction Oven that can be controlled by using smartphone via wifi; User will command the Arduino Uno microcontroller via ESP8266 module and the Oven will execute the given tasks.

PUBLICATIONS

- “A study on self similar, nonlinear and complex behaviour of the spread of COVID-19 in India” Book Chapter of Advances in Mathematical Analysis and its Application , CRC Press; DOI: 10.1201/9781003330868-18; Publication Date: December 12, 2022
- “INVESTIGATION OF SELF-ORGANIZED CRITICALITY IN DAILY NEW CONFIRMED CASES OF COVID-19 IN SOME MAJOR AFFECTED INDIAN STATES” Journal name: Bulletin of Calcutta Mathematical Society; ISSN: 0008-0659; Publication Date: February 21, 2021

SKILLS

- **Languages:** Basics of C and Python
- **Technical skills:** Sensors and Transducers, Process Control, Basics of PLC(GX Works), DCS, SCADA
- **Tools:** Smart-GIT, CATCH
- **Protocols:** HART, UART
- **Platforms:** Microcontrollers, Embedded Systems, LabVIEW, Multisim, Experience with MATLAB and Simulink
- **Soft Skills:** Leadership, Event Management, Documentation, People Management, Presentation

RESPONSIBILITIES

- Placement Coordinator (May 2023 - May 2024) - National Institute of Technology Silchar
- Prefect (Advisor), Boys' Hostel 5 (September 2022- July 2023) - National Institute of Technology Silchar
- Placement Coordinator (March 2021 - July 2022) - University Institute of Technology, The University of Burdwan
- Overall Coordinator; Entrepreneurship Cell (January 2020 - December 2021) - University Institute of Technology, The University of Burdwan

ACHIEVEMENTS

- District Champion AIDS Quiz by State Aids Control Society West Bengal 2021
- Burdwan University Champion on IETE Students' Day Quiz 2019
- District Champion Election Commission of India National Quiz 2018
- Sub-Divisional Champion of Voters' Day Quiz 2017
- District Champion of RMSA Quiz 2016 and 2017 and Extempore in 2017

EXTRACURRICULAR

Quizzing, Debating, Extempory