



## Sharad Bhowmick

Electrical Engineer

[sharad.leeds20@gmail.com](mailto:sharad.leeds20@gmail.com)

Leeds, U.K.

+44 7507370017

LinkedIn: [linkedin.com/in/sharadbhowmick](https://www.linkedin.com/in/sharadbhowmick)

Website: <https://sharadbhowmick.github.io/sb/>

### Skills

- ♦ MATLAB/Simulink
- ♦ MS Office Suite
- ♦ NI Multisim
- ♦ Eagle
- ♦ Circuit Designing
- ♦ Soldering
- ♦ JDA WMS
- ♦ Knowledge of Technical Diagram
- ♦ C++
- ♦ AutoCAD
- ♦ PSpice
- ♦ LabView
- ♦ Tableau
- ♦ Arduino
- ♦ PCB etching
- ♦ Strong Analytical Abilities

### Internships

**Intern Electrical Engineer,**  
**M.P. State Load Dispatch Centre,**  
**Jabalpur**

DECEMBER 2016

- ♦ Reviewed daily load demand curve and did short term load forecasting.
- ♦ Acquired knowledge about SCADA and components of Distribution Centre.

**Intern Electrical Engineer,**  
**M.P.P.T.C.L 220KV Substation,**  
**Jabalpur**

July 2017

- ♦ Designed one-line diagrams, schematic diagrams and prepared Bill of Materials.
- ♦ Assisted the site supervisor in the maintenance of the transformer and in preparing reports of the maintenance.

### Achievements

- ♦ Runners-up in Shell Eco-Marathon India at Chennai.
- ♦ Stood third in technical innovation in SEM-A at Singapore.
- ♦ Won a solo Debate during the CADO-Wood competition.
- ♦ Overall CADO-Wood competition winner with SRM-NCC.

### Publication

- ♦ Geetha, A., ThamizhThentral, A., Silekar, S.A., Katiyar, G., Mishra, G. & Bhowmick, S. "Analyzing the Characteristics of Different Types of Motors Used in Electric Vehicles" International Journal of Recent Technology and Engineering. 2019, 7 (5S2), 176-179

## Profile

Passionate and assiduous Electrical Engineer with a background and history of optimizing systems using an amalgamation of time tested as-well-as unorthodox techniques. I deliver results of the highest standard and aspire to research in the field of Energy Systems to realize the goal of a carbon-neutral world.

## Education

**M.Sc. Electrical Engineering and Renewable Energy Systems,**  
**University of Leeds, Leeds, U.K.**

SEPTEMBER 2019 — SEPTEMBER 2020

**Modules studied:** Control System Design, Smart Grid Analysis, Power Electronics Drives, Electric Power Generation and Distribution, Modern Industry Practices, Programming

63% Passed with Merit

**B.Tech. Electrical and Electronics Engineering, SRM Institute of Science and Technology, Chennai, India**

JUNE 2015 — MAY 2019

**Modules studied:** Linear Integrated Circuits, Micro-controller and Microprocessor, Discrete Mathematics, Electromagnetic Theory, Electrical Machines, Material Science, Physics, etc., Power System Protection.

71% First Class

## Projects

### Novel slipstream detection technique

- Conceptualized a method to determine slipstream in vehicles.
- Mathematical modelling of 2-Dimensional sonic anemometer.
- Designed the circuits using NI-multisim.

### PV based dissolved oxygen controlling system for pisciculture

- Performed calculation to find parameters of aerator, pump, P.V. panels and the storage system.
- Designed a DIDO converter in MATLAB Simulink.
- Validation on a test pond proved 20 percent increase in the fish yield.

### Collision detection system for cars

- Conceptualized and designed a prototype using ultrasonic sensor in Arduino platform.
- Integrated kill switch to cut power in case of collision.
- Integrated GSM module to send message to pit crew in case of collision.

### IoT based Jewelry theft prevention system

- Created a prototype to detect stolen jewelry using Arduino Uno and RFID.
- Compiled documentation for the project.

## Work Experience

### Admin, NHS Clipper Warehouse, Leeds

OCTOBER 2020 — OCTOBER 2020

- Managed inbound and outbound logistics.
- Managed inventory using JDA WMS Dispatcher software.

### Electrical Engineer, Infieon Supermileage (University team)

MARCH 2016 — APRIL 2019

- Designed electrical systems and electro-mechanical components for super mileage vehicles.
- Optimized electrical wiring and energy storage system of the vehicle.
- Built electro-mechanical clutch resulting in 75% lower frictional losses.
- Optimized electrical system was 45% lighter and 30% cheaper.
- Initiated work on the hybrid powertrain.
- Compiled documentation of electrical system for Technical Inspection.

### President, Engineers Without Borders, SRM Chapter

MAY2016—APRIL 2020

- Completed 9 projects and awareness drives in Chennai, India.
- Organized two National level Energy conferences.
- Lead a project analyzing PM 2.5 particles by trucks, which resulted in the barring of heavy vehicles in one of the residential areas.
- Lead a project, building 7 toilets for a poor household.
- Increased fund generation by 25 % and team strength by 230 %.