# Shreyashri BISWAS

A passionate and hard-working engineer who aspires nothing but perfection in her work with the dream of advancing the world of technology

## Education

**Btech (ECE)** SRM IST Chennai, India / Since July 2018 9.1 CGPA

Sr. Secondary BBPS, Dwarka Delhi, India / From April 2016 to April 2017 CBSF

## Work experience

Associate Technical Lead @The Project Team, SRM IST / Since February 2020

Core Technical Member - 2019 | Team Member - 2018

**ECE Department Representative** @PAL, a IIT, Madras association SRM IST, KTR / Since August 2020

**Electronics and Hardware Engineer Dot Enterprises** Remote / From May 2020 to September 2020

Worked on developing their product DASH from scratch

**Internship** @NEUR Industries Pvt. Ltd ,Chennai, India / From January 2020 to March 2020

Worked in the Electronics dept - Cybernetics for Prosthetic Limbs

## **Achievements**

#### Final selected team for Open Project from SIIC, SRM IST

Selected amongst 30 shortlisted teams over the course of 4 months. Project: 'Predictive Smart Machine Authorizer' for automizing FABLAB

#### Selected and Worked in project funded by Ministry of HRD

For the project under 'Unnat Bharat Abhiyan'. Project: Robust Public Distribution System

#### Selected and worked in project funded by SRM IST, KTR

For an IoT and Edge Cloud Computing Project. Project: Smart Residential Community

#### Winners of Bosch Hackathon - Phase 2

Amongst 600 shortlisted teams from all over India

#### Qualified and reached the finals for multiple National Hackathon Finals

CodieCon, Ctrl+Alt+Code, Horizon'19, Solve for Safer India by Bosch, Smart India Hackathon

## Research Work

Title: Photon Absorption Efficiency for Crystalline Silicon Solar Cell and Optimizing the Thickness of the Absorptive Layer

Under Dr. Shanthi Prince (Prof), Mr. AVM Manikandan (Asst. Prof)

#### Title: The Firefly Unit

A mobile ad-hoc network communication system using Zigbee and LoRaWAN protocols for IoT applications in Remote Locations









mail@simplyshreya.in

www.simplyshreya.i

9871492867

## Skills

#### Internet of Things

ARM Architecture, Arduino, Raspberry Pi, Node MCU, Manet, MQTT, Zigbee, LoRa, Embedded C

**Electronics and Embedded systems** 

PCB designing, Circuit Designing, Matlab, Simulink, freeRTOS

#### Web Development

HTML, CSS, MongoDB, Javascript, Firebase, Bootstrap, Gatsby

**Computer Vision** 

Open CV

Machine Learning

TensorFlow, Keras, Pandas, sklearn, TF lite

**OS/Tools** 

Linux, Git, Docker, Putty, VSCode

Other Skills

Team management, Project management, Video Editing - Premiere Pro, Photo Editing - Photoshop, Blogging

## **Projects**

#### Dot- DASH (Direct Automated Shelf Helper) - 2020

- DASH automatically creates a shopping list for your groceries using the smart loT sensor that is inbuilt in it.
- Developed the product from scratch till deployment.
- My work involved: freeRTOS, Battery optimization, and power management,
  Circuit designing, PCB designing, AWS architecture

#### WebinAR - 2020

- An all-in-one Education platform with integrated interactive AR models, Video chat classroom, and speech to caption capability
- Worked in the speech to text, speech recognizing, backend processing

#### MedX - 2020

- MedX is a Web App made using Etherium Blockchain to track and maintain Corona test records in a manageable and reliable way.
- Worked in the Backend using Node.js, Vanilla Js, and Web3 APIs

#### Predictive Battery Management System (ongoing) - 2020

Prediction of SOC, SOH, and RUL along with AWS cloud support

#### Predictive Smart Machine Authorizer- 2019

- Gives control over the access to heavy machinery along with monitoring the health of every machine. All the data is concisely presented on the front end and the logs in the database.
- Worked in PCB designing, Circuit Designing, Web Dev

#### **Smart Residential Community - 2019**

- A real-life applied project to monitor physical parameters like air and water quality using Kubernetes and IoT.
- Worked on Wireless Sensor Network and Backend

#### Road Condition Monitoring System - 2019

- RCMN is an end-to-end solution for monitoring the condition of roads and bring critical failures to the notice of the responsible personnel. The system automatically passes the raised ticket to higher authorities to ensure that the condition is maintained.
- Worked on Sensor Package and Backend

#### AutoMate - 2019

- We designed a system that can inform the Auto-Rickshaw drivers of the demand in advance for the Last-mile commute.
- Worked on the front and back end.

#### Farmer's Assistant -2018

- An effective monitoring solution for farmer's to bring valuable insights
- Worked on IoT and data processing

## Other experiences

Emcee IoET Conference 2020 Virtual / From July 2020 to July 2022

Head Student Convenor IoET Conference Virtual / July 2020

Organized and Convened for the IoET Conference 2020 - Virtual Summit

Outreach Program @TEKNICUS Chennai, India / September 2018

An initiative by The Project team- TEKNICUS: To educate kids nowadays in creative use of Science

Event manager @The Project Team Chennai, India / February 2019

Coordinated 'Arduino Day'

**Volunteer** @National Service Scheme Chennai, India / From July 2018 to November 2018

# Programming Languages

**Python** 

Libraries: Numpy, Pandas, TensorFlow, OpenCV

**Javascript** 

Frameworks: Node.js, Express.js React.js, Gatsby

C++

## **Hobbies**

Making DIY projects

**Photography** 

Reading Books

Cooking

**Painting** It helps me put my thoughts in a tangible form

**Music** Singing along my ukelele and piano is one of my favorite pastimes

## Languages

**English** 

Hindi

Bengali/Bangla