

# Supragya Shrestha

Roll No.:170103068

B.Tech - Mechanical Engineering

Minor in Electronics and Electrical Engineering Indian Institute Of Technology Guwahati +91-8402022506 supragyashrestha02@gmail.com shres170103068@iitg.ac.in github.com/supragyashrestha linkedin.com/in/supragya02

# EDUCATION

Degree/Certificate	${\bf Institute/Board}$	CGPA/Percentage	Year
B.Tech.	Indian Institute of Technology, Guwahati	8.27 (Current)	2017-Present
Senior Secondary	CBSE Board	94.4%	2016
Secondary	CBSE Board	95.0%	2014

#### EXPERIENCE

#### • Samsung Research Institute, Noida

May 20 - Jun 20

Software Development Intern

git.io/JUZiB

- Implemented the task of **Human Activity Detection** using **YOLO** Object Detection Model trained on Stanford 40++ Dataset and achieved average mAP of **72.24**@0.5.
- Built a Web App for detecting human activities directly using a web browser with the help of a Flask App.

# **PROJECTS**

### • Multi-Fault Classification of Induction Motor using Machine Learning

Ongoing

Dr Rajiv Tiwari, Professor, Dept. of ME., IIT Guwahati

git.io/JUBSf

- Employing Deep Learning techniques for detecting and classifying the different kinds of fault occurring in Induction Motors.
- The proposed algorithm may be employed for condition-based monitoring in industrial equipment reducing human engagement in real-time fault detection and decision making.

# • Dehazing - Image Restoration using GANs

Jul 20 - Sep 20

Personal Project

git.io/JUZ6x

- Implemented the task of removing haziness from images (dehazing) using U-Net trained on Reside Dataset and further improved the results obtained using **Pix2Pix** and **CycleGAN**.

#### • Twident - Microbloging WebApp

May 20 - Aug 20

Personal Project

git.io/JUZij

 Designed a Twitter-like Web application using Bootstrap, Django, JavaScript and React.js. The application uses Django-REST framework as back-end and React.js as front-end.

# • MESA-Website Development

Nov 19 - Apr 20

MESA

iitg.ac.in/clubs/mesa

Designed a Website for Mechanical Engineering Student's Association and Seismech, the annual Technical Festival
of Mechanical Engineering Department using Bootstrap and JavaScript.

# TECHNICAL SKILLS

- Programming Languages: C++, Python, JavaScript
- Web Technologies: HTML, CSS, Flask, Django\*, ReactJS\*
- Database Management: SQL
- Miscellaneous: Git, SolidWorks, PyTorch\*
- Operating Systems: Windows, Linux\*

\* Elementary proficiency

## KEY COURSES TAKEN

- Computer Science: Data Structures & Algorithms', Operating Systems', Databases', Introduction to Computing
- Machine Learning: Introduction to Machine Learning', Deep Learning Specialization'
- Miscellaneous: Linear Algebra, Machine Design

'MOOCs

# Positions of Responsibility

• Departmental Intern Representative, Centre for Career Development, IITG

Sep 19 - Apr 20 Nov 19 - Apr 20

• Web Head, MESA, IITG

## ACHIEVEMENTS

- KVPY 2016 Scholarship: Awarded to 750 senior secondary science students across India.
- JEE Mains 2017: Secured All India Rank in the top 1% among 1.2M candidates appearing for the test.
- $\bullet$  **JEE Advanced 2017**: Secured All India Rank in the top 2% among 0.2M candidates appearing for the test.

#### EXTRACURRICULARS

- Cleared Google Code Jam Qualification Round 2020.
- Secured 2nd Position in Aero-modelling Competition in Kriti, the Inter-Hostel Technical Competition, IITG.
- Participated in the Inter-Hostel Mime Competition, IIT Guwahati.