

## Md. Didarul Islam

Department of Physics, SUST, Kumargaon, Sylhet-3114, Bangladesh

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### Research Interests

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- Climate Dynamics • Machine learning (XAI) for Climate science • Climate Modeling • Tropical Cyclone • Precipitation • Extreme Event • Data Assimilation • ENSO

### Education

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- **B.Sc. Hons. in Physics**, Shahjalal University of Science and Technology, Bangladesh, CGPA: 3.68 / 4 (first 7 semesters) **01/2019 - present**
- **HSC**, Jalalabad Cantonment public school and College, Bangladesh, GPA: 5.00 (English: A+, Mathematics: A+, Physics: A+, Chemistry: A+, Biology: A+, Information and communication technology: A+) **06/2016 - 07/2018**
- **SSC**, Nobin Chandra Govt. Model High School, Bangladesh GPA: 5.00 (English: A+, Mathematics: A+, Physics: A+, Chemistry: A+, Biology: A+) **01/2014 - 05/2016**

### Research Experience

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- **11/2022 - Present: Research Intern** with **Dr. Abdullah Al Fahad**, (Climate Physicist, NASA GSFC, MD, USA)
  - Working on Predicting cyclone tracks using the machine learning method.
  - Working on a GitHub project titled 'Python For Climate Science'
- **06/2023 - Present: Dr. Md Enamul Haque** (Associate Professor, Department of Physics, SUST)
  - Calculating the band gap of a semiconductor material
  - High-Performance Computing and Linux system(HPC)

### Computational Skills

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- **Programming Languages:** Python, Matematica, C, Matlab.
- **Python Packages:** Cartopy, Metpy, Numpy, Pandas, Matplotlib, tkinter, Machine Learning(Scikit-learn, Keras, Tensorflow).
- **Other Skills:** Microsoft Office, Quantum Espresso, High Performance Computing, Linux(bash scripting)

## Teaching Experience

- 06/2018 - 07/2021: physics Instructor((Compass Academic Care, Sylhet).
- 03/2018 - 04/2019: Physics Instructor (Fusion Coaching Center, Sylhet).
- 01/2018 - 03/2018: Math Instructor (UCC, Sylhet).

## Organizing Experience

- 02/2019 - Present: General member- SUST Physics Society
- 04/2019 - Present: General member- Copernicus Astronomical Memorial(CAM-SUST)
- 09/2022 - Present: General member- Bangladesh Geophysics Union

## Awards

- **Talent Pool Scholarship** in Primary School Certificate - 2010
- **Talent Pool Scholarship** in Junior School Certificate - 2013
- **General Scholarship** in Secondary School Certificate - 2016
- **Bronze Medal**, University Physics Competition - 2020
- **Bronze Medal**, University Physics competition - 2021
- **Bronze Medal**, University Physics competition - 2022
- **20th** position in International Theoretical Physics Competition - 2021

## Contact

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## References

Dr. Abdullah Al Fahad Climate Physicist  
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Dr. Enamul Haque  
Associate Professor, Department of Physics  
Shahjalal University of Science and  
Technology Email: tanvir\_sust@yahoo.com