# PABAN KUMAR BHUYAN

Email: pkb10@iitbbs.ac.in pabanbhuyan142@gmail.com/ Phone: +919583838030

Skype id: pabanbhuyan142\_1

Ocean Analysis and Modelling Laboratory, School of Earth, Ocean and Climate Sciences, Indian Institute of Technology Bhubaneswar, 308, SBS Building. Argul Campus, Jatani

Odisha, India, 752050

**Research Interests**: Ocean Circulation, Boundary Currents, Coastal Oceanography, Data Assimilation, Ocean Modelling, HF Radar, Scatterometer wind and application of Deep Learning in Oceanography.

### **EDUCATION:**

July 2018 – M.Tech in Climate Science and Technology(CGPA: 8.52/10)

present School of Earth, Ocean and Climate Sciences

Indian Institute of Technology Bhubaneswar, India.

Advisors: Dr. Sourav Sil

Thesis Title: "Characterization of East India Coastal Current from observation

and model".

July 2011 – B.Tech in Civil Engineering (CGPA: 6.75/10)

May 2015 Government College of Engineering Kalahandi, Odisha, India

### **Awards**

- **1.** 2011-2015 Foundation For Excellence Scholarship.
- 2. 2018-2020 GATE Fellowship

## **Skills Acquired:**

- 1. Good Working Knowledge in Python, Matlab, R, ROMS (Physical and Biological ).
- **2.** Experience in CDO, Fortran, Bash Scripting, SNAP (Sentinel Application Platform), GrADS, PARCELS(Probably A Really Computationally Efficient Lagrangian Simulator), ODV(Ocean Data View), Panoply, ParaView.

## FIELD Experience:

- **1.** IIT Bhubaneswar State Pollution Control Board Joint Program (2 days on R/V Sagar Utkal). Conducted for Observational Data collection using CTD and Current meter from Bay of Bengal(Paradeep Coast).
- **2.** Visit to Indian Meteorological Department for launching of Radiosonde, and to study different observational instrument for rainfall, solar irradiance, temperature and humidity measurements.

Job Experience- August 2015- March 2016 ( Site Engineer at LP Associates )
May 2016- October 2016 ( Site Engineer at JUSCO )

## OTHER RESEARCH EXPERIENCE

March 2019 – January 2020

Advisors: Dr. Sourav Sil

- Partly worked on projects entitled:
  - 1. Quality Control of HF Radar Surface Currents for the investigation of sub-mesoscale Coastal Process and its use for assimilation in the INCOIS Model.

**Sponsoring agencies:** Indian National Centre for Ocean Information Services (INCOIS).

## **Conference:**

- 1. **Paban Kumar Bhuyan**, Samiran Mandal and Sourav Sil: Characterization of the East India Coastal Current using a Drifter, HF Radars and Altimetry during October November 2015. "AGU Fall meeting 9 13 December 2019". <a href="https://doi.org/10.1002/essoar.10501913.1">https://doi.org/10.1002/essoar.10501913.1</a>.
- **2. Paban Kumar Bhuyan** and Sourav Sil: Inter-annual Variation of Salinity Associated with Boundary Currents in the Bay of Bengal. "International Symposium on Advances in Coastal Research with Special Reference to Indo Pacific-2019" AdCoRe IP-2019 (17-19 December 2019).
- **3. Paban Kumar Bhuyan**, Samiran Mandal and Sourav Sil: Characterization of the East India Coastal Current using a Drifter, HF Radars and Altimetry. "Sixth Biennial Conference of Ocean Society of India" OSICON 19 (12-14 December 2019).
- **4.** Rahul Deogharia, Samiran Mandal, **Paban Kumar Bhuyan**, and Sourav Sil: A kriging based approach to restoration of HF radar derived ocean surface currents. "Sixth Biennial Conference of Ocean Society of India" OSICON 19 (12-14 December 2019).

### **MANUSCRIPTS IN PREPARATION:**

1. "Characterization of the East India Coastal Current using a Drifter, HF Radars and Altimetry during October – November 2015" will be submitted to Journal of Operational Oceanography.

## **Workshop Attended:**

**1.** International Workshop on "Discovery and Use of Operational Ocean Data Products and Services"

Jointly Organised by the UNESCO/IOC IODE and INCOIS-ITCOcean 01-05 July 2019, Hyderabad, India.

2. "Use of Earth Observation data for improved Urban Environmental Monitoring" Jointly Organised by Indian Institute of Technology Bhubaneswar and the University of Southampton.

10-11 July 2019, IIT Bhubaneswar, India.

- 3. "Neural Network Machine Learning Bootcamp." Conducted by Coding Blocks. 24-25th August 2019. IIT Bhubaneswar, India.
- 4. "TERI NORCE Research School on Data Science in Climate Research: Perspectives on Climate Extremes"15-18 October 2019.
  Organised by The Energy and Resources Institute (TERI) in collaboration with NORCE Klima Research Center, Norway.
- **5.** "CHAPNET-2019: International Workshop on Advanced Machine Learning Techniques for Climate Informatics", 04-06 November 2019.

Organized by: Geoscience and Remote Sensing Society (GRSS, IEEE), Kolkata Chapter
In association with

Center for Soft Computing Research, Indian Statistical Institute, Kolkata, India

## **COURSES ATTENDED:**

**Core Courses** 

- Mathematical and Statistical Methods in Earth System Science.
- Dynamics of Atmosphere and Ocean.
- Physics of Atmosphere and Ocean.
- Satellite Oceanography and Meteorology.
- Planetary and Marine Boundary Layer.
- Simulations of Atmospheric and Oceanic Processes.

### Other Courses

- Advanced Dynamic Meteorology.
- Science of Climate and Climate Change.
- Tropical Meteorology.
- Earth and It's Interior.