

# **PRANAYKUMAR TIRPUDE**

PNY 109, 225 Academy St, Newark, DE 19716  
Phone: 302-602-0224  
pranaykt@udel.edu

## **EDUCATION**

---

<b>PhD</b>	University of Delaware, Department of Earth Sciences Advisor: <u>Dr. Chandranath Basak</u>	Fall 2023 - Ongoing
<b>MSc</b>	Banaras Hindu University, Department of Geology Thesis: "AI/ML-Based Sea Surface Temperature Estimation Using Planktic Foraminiferal Assemblage from the IODP site U1457" Advisor: <u>Prof. Arun Deo Singh</u>	Jul 2021
<b>BSc</b>	Fergusson College Pune, Department of Geology Majoried in Geology	Jun 2019

## **RESEARCH EXPERIENCE**

---

<b>PhD Student</b>	University of Delaware, Department of Earth Sciences Project: Antarctic Ice Sheet Dynamics across the Mid-Pleistocene Transition Through High-Resolution IRD Records Advisor: <u>Dr. Chandranath Basak</u>	2023- Present
<b>Junior Research Fellow</b>	Indian Institute of Science, Department of Earth Sciences. Project: Reconstruction of atmospheric CO <sub>2</sub> using Boron Isotope ratios in Foraminifera Advisor: <u>Dr. Sambuddha Misra</u> - Species-level identification of Foraminifera. - Chemical cleaning and processing of samples inside class 100 clean lab. - Handling ICP-OES and QQQ-ICP Mass Spectrometer	2021- 2023
<b>M.Sc. Student</b>	Banaras Hindu University, Department of Geology. Project: Sea Surface Temperature estimation using AI and Foraminifera Advisor: <u>Prof. Arun Deo Singh</u> - Coding in Python, C++, BASH, SLURM - AI-Data Science and Cartography: ANN, SVM, AdaBoost, RFA, PyFERRET, Generic Mapping Tools, SeasDAS, Ocean Data View (ODV) - Operating systems: Linux, Windows, Mac	2019-2021

## **TEACHING EXPERIENCE**

---

<b>Teaching Assistant</b>	University of Delaware, Department of Earth Sciences Responsibility: Teaching lab sections of the following courses GEOL107 - Geology of Dynamic Earth GEOL113 - Earth Science GEOL115 – Geological Hazards	Fall, Spring 2023,24
---------------------------	---	----------------------

## HONORS AND AWARDS

---

<b>ONGC Scholarship</b>	Awarded by Oil and Natural Gas Corporation of India to meritorious students in the geosciences field.	Dec 2019
<b><u>INSA SRF</u></b>	Summer Research Fellowship, jointly awarded by Indian National Science Academy, Indian Academy of Science, and The National Academy of Sciences, India	Jun 2018

## CONFERENCES, WORKSHOPS, AND INTERNSHIPS

---

<b>American Geophysical Union (AGU)</b>	Oral Presentation: Understanding the Antarctic Ice Sheets Dynamics Through High-Resolution IRD Records Using Artificial Intelligence and Machine Learning Models	Dec 2024
<b><u>PyRATES, LinkedEarth</u></b>	<u>Information Science Institute, University of Southern California</u> Topic: Python and R analysis of time series and FAIR science publishing	Jun 2024
<b>Summer Research Internship</b>	University of Delhi, Department of Earth Science Topic: Micropaleontological investigation of Deccan Intertrappean beds. Advisor: <u>Prof. GVR Prasad</u>	Jun 2018
<b>Winter Internship</b>	Atomic Minerals Directorate for Exploration and Research, Department of Atomic Energy, Government of India Topic: Lithostructural mapping and radiometric survey in Uranium mineralized zones of eastern India.	Dec 2019

## OUTREACH ACTIVITIES

---

<b><u>Coast Day</u></b>	Annual outreach activity organized by the College of Earth, Ocean, and Environment, University of Delaware Theme: International Ocean Discovery Program and Paleoclimate Demonstrated IODP drilling and its significance in Paleoclimate studies to ~200 people.	Oct 2023, 24
<b><u>IISc Open Day</u></b>	Annual outreach activity organized by the Indian Institute of Science Theme: World of Microfossils and their importance in Paleoclimate studies Demonstrated the use of different marine microfossils to study past climate	Feb 2023

## MEMBERSHIPS

---

American Geophysical Union  
Geological Society of America