PERSONAL DETA	ILS	PERMANENT ADDRESS	
Name	ABHISHEK KUNDU	89, Zilla Parishad Road,	20
Sex	MALE	C/o. Goutam Kumar	
DOB	09-09-1992	Kundu, P.O. Bholardabri,	
Email	abhishek.kundu832@gmail.com	Dt. Alipurduar, West	
Phone No.	(+91) 9735045100; 8910943685	Bengal, India, Pin: 736123	
Passport No.	\$8520671		AL AL
Google Scholar	scholar.google.com/citations?user=hX5LHZIAAAAJ&hl=en		1 4 1 1

# **Career Objective**

I am a budding researcher in the field of earthquake seismology with a strong knowledge of geology and tectonics. My research focuses on the tectonic and geodynamic evolution of convergent and collisional settings with the implementation of passive seismological techniques.

### **Research Interests**

- Crustal structure investigation based on Receiver Function techniques.
- ✤ Seismicity and seismotectonic.
- ✤ Modeling of earthquake source mechanism using waveform inversion.
- Estimation of earthquake source parameters through spectral analysis.
- Seismic anisotropy study of crust and upper mantle based on shear wave splitting technique.

# **Educational Details**

QUALIFICATION	INSTITUTE/DEPART MENT	UNIVERSITY	YEAR	% of MARKS/ CGPA/STATUS
Postdoctoral Research	Department of Earth	Yonsei University, Seoul,	1 <sup>st</sup> Feb	Ongoing
Fellow	System Sciences	South Korea	2024	
Postdoctoral Research	NRGRL (IIG)	Indian Institute of	31 May, 23	7 months
Associate (RA-I)	Shillong	Geomagnetism (IIG)	- 8 Jan, 24	10 days
Ph.D. [Earthquake	Wadia Institute of	Banaras Hindu	2022	Awarded
Seismology]	Himalayan Geology,	University, Varanasi,		
	Dehradun, India	India		
M.Sc. [Applied	Presidency University	Presidency University,	2016	8.55
Geology]		Kolkata, India		(CGPA)
B.Sc. (Hons.)	Asutosh College,	University of	2014	61.25%
[Geology]	Kolkata, India	Calcutta (C.U.)		

# Academic Achievements/Involvements

- ♦ Qualified **CSIR-NET** (**JRF**), **2016** in Earth Sciences.
- Placed 1<sup>st</sup> at Alipurduar High School in the West Bengal Education Board's Class X (2008) and XII [Science] (2010) exams with 94.375% and 84.8% marks, respectively.
- Industrial training on 'Uranium exploration techniques at Singhbhum Shera Zone' at Atomic Mineral Directorate, Eastern Region, Jamshedpur in May 2015.
- Summer Project on 'Sustainable Development and management of Groundwater resources' under Central Ground Water Board, Eastern Region, India in June 2015.
- Ranked 8th in Presidency University and 13th in Jadavpur University entrance examination of M.Sc course in 2014.
- Participated in Geospectrum, Brainstorm, and Geologix events at Prithvi, organized by IIT Kharagpur in March 2013.

## Field Experiences

PROJECT	SUPERVISOR	YEAR
Data retrival and maintenance of the BBS network installed by	Self	2023
NEGRL (IIG) Shillong in different parts of Northeast India.		
Data retrival and maintenance of the BBS networks in Siang valley,	Dr. Devajit Hazarika	2021
Arunachal Pradesh and Kumaon Himalaya, Uttarakhand.		
Installation of a seismological network comprised of 8 BBS stations and	Dr. Devajit Hazarika	2019
data retrieval from the Siang Valley in Arunachal Pradesh, India.		
Establishment of ten broadband seismological stations' network,	Dr. Devajit Hazarika	2017
maintenance of the BBS stations, and collection of data from Kali		
River profile in Kumaon Himalaya, Uttarakhand, India.		
Master's Thesis Paper: Analysis of lineation in the Singhbhum Group	Prof.Gautam Kumar Deb	2015
of Rocks in and around Bangriposi, Mayurbhanj District, Odissa,	and Prof. Arijit Ray	
India.		
Structural mapping of highly deformed terrain at Matalia Jhor and	Prof. Nilanjan Dasgupta and	2015
lithological study in and around Angul, Odisha.	Prof. Sankar Bose	

Relevant Computation Skill		
Global mapper, Map Info	Used for map making, and performing other geomorphic and hydrological	
	analysis.	
Generic Mapping Tool	The GMT and ObsPy are collections of open-source computer software, including	
(GMT), ObsPy	rasterization, filtering, image processing, different kinds of map projections. and	
	handling and plotting seismological data.	
Python and Shell script	Basic programming abilities	
(Linux)		
SEISAN	Earthquake analysis software.	
SAC	The Seismic Analysis Code software is used for analyzing seismic waves.	
Coral Draw, Surfer, Grapher	Used for image editing, analyzing, and visualizing complex datasets.	
ISOLA	Used for finding focal mechanism solutions of local earthquakes.	
MATLAB, SplitLab	Source parameter estimation and Anisotropy study	

#### **Conferences/Workshops**

- Abhishek Kundu, Devajit Hazarika, Somak Hajra "Crustal thickness and Poisson's ratio variations in the northeast India–Asia collision zone (Tidding Suture)". 3<sup>rd</sup> National Geo-Research Scholars Meet 2019, WIHG, Dehradun, Uttarakhand.
- Abhishek Kundu, Devajit Hazarika "Seismotectonics of the indenting northeast corner of the Indian plate in the Tidding-Tuting Suture Zone of the Eastern Himalayan Syntaxis". 42<sup>nd</sup> AEG Conference, 2021
- Abhishek Kundu, Devajit Hazarika "Seismotectonics of the indenting northeast corner of the Indian plate in the Tidding-Tuting Suture Zone of the Eastern Himalayan Syntaxis". 58<sup>th</sup> Annual Convention of Indian Geophysical Union (IGU), 2022.

# Languages Known

- Bengali [Mother's tongue] (R/W/S)
- English (R/W/S)
- ➢ Hindi (R/W/S)

#### **Peer-Reviewed Publications**

- Kundu, A., Hazarika, D., Hajra, S., Yadav, D.K., 2023. Imaging the crustal structure at the indenting northeast corner of the Indian Plate beneath the Eastern Himalayan Syntaxis. *Geophysical Journal International*, ggad284, 235 (2), 1035–1048. https://doi.org/10.1093/gji/ggad284
- Kundu, A., Hazarika, D., Yadav, D.K. and Ghosh, P., 2022. Crustal thickness and Poisson's ratio variations in the Siang Window and adjoining areas of the Eastern Himalayan Syntaxis. *Journal of Asian Earth Sciences*, 231, 105225. <u>https://doi.org/10.1016/j.jseaes.2022.105225</u>
- Kundu, A., Hazarika, D., 2022. Estimation of source parameters and scaling relations for local earthquakes of Lohit Valley in Arunachal Himalaya, Northeast India. *Geological Journal* 57; 4872-4885. <u>https://doi.org/10.1002/gi.4423</u>
- Kundu, A., Hazarika, D., Hajra, S., Singh, A.K., Ghosh, P., 2020. Crustal thickness and Poisson's ratio variations in the northeast India–Asia collision zone: Insight into the Tuting-Tidding Suture zone, eastern Himalaya. *Journal of Asian Earth Science*, 188, 10499. <u>https://doi.org/10.1016/j.jseaes.2019.104099</u>
- Hazarika, D., Kundu, A., Ghosh, P., 2022. Seismotectonic scenario of the indenting northeast corner of the Indian plate in the Tidding-Tuting Suture Zone of the Eastern Himalayan Syntaxis. *Tectonophysics* 824, 229197. <u>https://doi.org/10.1016/j.tecto.2021.229197</u>
- Das, A., Hazarika, D., Kundu, A., Kumar, N., Yadav, D.K., 2024. Sedimentary thickness and basement topography in the western part of the Indo-Gangetic Plain and Siwalik Himalaya inferred from receiver function analysis. *Geophysical Journal International*, 236 (3), 1424–1438. <u>https://doi.org/10.1093/gji/ggad499</u>
- Shukla, N., Hazarika, D., Kundu, A., Mukhopadhyay, S., 2022. Spatial variations of crustal thickness and Poisson's ratio in the north-eastern region of India based on receiver function analysis. *Geological Journal* 57 (2). <u>https://doi.org/10.1002/gj.4469</u>
- Hajra, S., Hazarika, D., Shukla, V., Kundu, A., Pant, C.C., 2022. Stress dissipation and seismic potential in the central seismic gap of the north-west Himalaya. *Journal of Asian Earth Science*, 239, 105432, <u>https://doi.org/10.1016/j.jseaes.2022.105432</u>
- Hazarika, D., Hajra, S., Kundu, A., Bankhwal, M., Kumar, N. and Pant, C.C., 2021. Imaging the Moho and Main Himalayan Thrust beneath the Kumaon Himalaya: constraints from receiver function analysis. *Geophysical Journal International*, 224(2), pp.858-870. <u>https://doi.org/10.1093/gji/ggaa478</u>
- 10. Hajra, S., Hazarika, D., Bankhwal, M., Kundu, A., Kumar, N., 2019. Average crustal thickness and Poisson's ratio beneath the Kali River Valley, Kumaon Himalaya. *Journal of Asian Earth Science*, 173, 176-188. <u>https://doi.org/10.1016/j.jseaes.2019.01.010</u>
- 11. Kundu, A., Hazarika, D., Hajra, S., Paul, A., 2023. Understanding the deformation pattern of the crust and lithospheric mantle at the indenting northeast corner of the Indian Plate beneath the Eastern Himalayan Syntaxis. *Physics of the Earth and Planetary Interiors* (Under Review)

#### DECLARATION

I hereby declare that the above information is correct to the best of my knowledge.

Akhishek Kundu

REFERENCES				
Name	Prof. J. R. Kayal	Dr. Devajit Hazarika		
Designation	Retd. Deputy Director General (Geophysics Division)	Scientist "E"		
Address	Geological Survey of India, Kolkata	WIHG, Dehradun		
Mail ID	jr.kayal@gmail.com	devajithazarika@gmail.com		
Phone No:	+919830675424	+919761197566		