



Lipsa Routray

Roll No.:196155003

PhD. - Center for Linguistic Science and Technology

Indian Institute Of Technology, Guwahati

+91-9861694814

lroutray@iitg.ac.in

lipsaroutray90@gmail.com

linkedin.com/in/lipsa-routray-6340b664

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
PhD.	Indian Institute of Technology, Guwahati	Current	2019-Present
M.Tech.	International Institute of Information and Technology, Bhubaneswar	6.74	2015-2017
B.Tech.	Biju Patnaik University of Technology, Bhubaneswar	7.2	2007-2011
Senior Secondary	CHSE Board	74.44%	2007
Secondary	BSE Board	83.44%	2005

PHD

• Research Scholar (IIT Guwahati)

Jul. 2019 - Continue

Title: Designing electric bus dashboard for Indian drivers

- Pursuing a PhD focused on designing a user-centered dashboard for electric buses in India. The research emphasizes innovative functionality in digital consoles, enhancing usability and safety for drivers. Conducted extensive user research with bus operators, drivers, and stakeholders to identify key needs and usability issues.
- Utilized simulator-based experiments to test interface designs and assess the cognitive load, task efficiency, and driver interaction. Aimed at improving dashboard design for better accessibility and safer driving experiences.

PROJECTS

• Project Assistant (IIT Bhubaneswar)

Sept. 2017 - Jun. 2019

Title: Speech Interface for Form Filling Application

- Acoustic Speech Recognition model design
- Speech interface design

WORK EXPERIENCE

• Assistant Manager

Dec. 2013 - Jun. 2015

Embesys Technologies, Bhubaneswar

- Research Lab set up for academic institutes

• People Development Manager

Sept. 2012 - Nov. 2013

Godrej & Boyce Mfg Co. Ltd, Bhubaneswar

- Training people for product knowledge

TECHNICAL SKILLS

- **Programming:** Python, C/C++, Java Script
- **Human-Computer Interaction:** UX/UI, Interface Design, User-Centered Design

PUBLISHED PAPERS

- Routray, Lipsa, Abhishek Shrivastava, and Priyankoo Sarmah. "Assessing the Usability of Electric Car Interfaces: A Focus Group Study." International Conference on Intelligent Human Computer Interaction. Cham: Springer Nature, 2024.
- Routray, Lipsa, Abhishek Shrivastava, and Priyankoo Sarmah. "Enhancing E-Rickshaw Driving Experiences: Insights from User-Centric EV Dashboards in India." International Conference on Intelligent Human Computer Interaction. Cham: Springer Nature Switzerland, 2023.
- Routray, Lipsa, Abhishek Shrivastava, and Priyankoo Sarmah. "A survey on Indian user's purchasing intention of electric vehicle and the factors influencing their decision." 2023 IEEE 3rd International Conference on Sustainable Energy and Future Electric Transportation (SEFET). IEEE, 2023.
- Deka, C., Sah, S., Shrivastava, A., Phukon, M., & Routray, L. (2021, December). Assessing a Voice-Based Conversational AI prototype for Banking Application. In 2021 8th NAFOSTED Conference on Information and Computer Science (NICS) (pp. 211-216). IEEE.
- Routray, Lipsa, Pradyut Biswal, and Satya Ranjan Pattanaik. "Ecg artifact removal of eeg signal using adaptive neural network." 2018 IEEE 13th International Conference on Industrial and Information Systems (ICIIS). IEEE, 2018.

SEMINARS & WORKSHOPS

- **Design for Sustainability**,SSI Lab, Department of Design, IIT Guwahati *21-25th Feb 2024*
- **Unmute Toolkit Launch Workshop**,CLST, IIT Guwahati *5th Jan 2024*
- **India HCI 2023 Women in HCI Track**,Breaking Barriers:Empowering Women in EV driving *23-25th Nov 2023*
- **India HCI 2023 in HCI Workshop**,Reimaging Electric Bus IC for Enhanced User Experience *23-25th Nov 2023*
- **Application of Eye-tracking in Cognitive Science Research**,iBrain,CLST,IIT Guwahati *5th Aug 2023*
- **Thesis & Research Paper Writing in MS Word**,RI Conclave-Integration 23, IIT Guwahati *1-2nd April 2023*
- **Design Doctoral Consortium**,IDC School of Design, IIT Bombay *4-5th Mar 2023*
- **Dynamics and Control of Robotic System through MATLAB**,TIH, IIT Guwahati *18-22 Feb 2023*

REVIEWER

- **2nd International Conference on Artificial Intelligence, Machine Learning and, Intelligent Systems** *NIT-HMP 2025*
 - **IEEE International Conference on Smart Power Control and Renewable Energy**, *NIT-RKL 2024*
 - **IEEE 3rd International Conference on Applied Electromagnetics, Signal Processing and, Communication** *KIIT-BBSR 2023*
 - **4th International Conference on Communication, Circuits, and Systems**, *KIIT-BBSR 2023*
 - **2023 IEEE 3rd International Conference on Sustainable Energy and Future Electric, Transportation (SeFeT 2023)** *SOA-BBSR 2023*
-