



Jimut Bahan Pal

Ph.D. Candidate.
SIC-401, 4th Floor, KRESIT Building.
Indian Institute of Technology, Bombay.
Powai, Mumbai, Maharashtra 400076.
e-mail: jimutbahanpal@yahoo.com
Website: <https://jimut123.github.io/>

"Researching innovative Deep Learning solutions."

Research Interests

Deep Learning, Computer Vision in Medical Settings, Semi-supervised Learning, Generative Networks, Explainable AI and Unsupervised Learning.

Education

- 2022 – Present **Ph.D.** Centre for Machine Intelligence and Data Science, *Indian Institute of Technology Bombay*
- 2019 – 2021 **M.Sc. in Computer Science**, *Ramakrishna Mission Vivekananda Educational and Research Institute*, Belur, Howrah.
 - o Thesis – **Instance Segmentation of Peripheral Blood Smear and Refining Classification via Domain Adaptation.**
- 2016 – 2019 **B.Sc. (Hons.) Computer Science** *St. Xavier's College*, Park Street, Kolkata.
 - o Dissertation – **Wisp: A Preference Based Location Finder Application.**

Awards & Accolades

- June 2022 **C-MInDS fellowship** for getting the **highest entrance test and interview scores in IIT Bombay**
- Feb. 2022 **Qualified in UGC-NET 2021**, for Assistant Professor.
- March. 2022 **Qualified in GATE 2021 and 2022.**

Publications

Conference Proceedings

- Oct. 2021 **Pal, J. B., & Paul, N. (2021).** Classifying Chest X-Ray COVID-19 images via Transfer Learning. In 2021 Ethics and Explainability for Responsible Data Science (EE-RDS) (p. 1-8). doi: 10.1109/EE-RDS53766.2021.9708580

Book Chapters

- July 2021 **Pal, J.B.** (2022). Holistic Network for Quantifying Uncertainties in Medical Images. In: Crimi, A., Bakas, S. (eds) Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries. BrainLes 2021. Lecture Notes in Computer Science, vol 12963. Springer, Cham. https://doi.org/10.1007/978-3-031-09002-8_49

Journals

- Feb. 2021 - **Pal, J. B.**, Bhattacharyea, A., Banerjee, D., & Maharaj, T. (Accepted). Instance segmentation of peripheral blood smear and refining classification via domain adaptation. Computer Methods in Biomechanics and Biomedical Engineering (Imaging & Visualization) journal
- July 2021
- Oct. 2020 - **Pal, J. B.**, & Mj, D. (Under Review). Improving multi scale attention networks: Bayesian optimization for segmenting medical images. Computer Methods and Programs in Biomedicine Update (Elsevier)
- July 2021

Preprints

- 2020 **Pal, J. B.** (2020). How to cluster nearest unique nodes from different classes using jjcluster in wisp application? CoRR, abs/2002.05886 . Retrieved from <https://arxiv.org/abs/2002.05886>

Experience

- March – **Computer Application teacher, RKMVERI, Belur, Howrah.**
- April, 2020 Taught the class of PGDY (2020-21) comprising 12 students about computer applications. Guided students to research on independent projects and develop communication skills.
- Jan – March, **Project Intern, Data Sutram, Rabindra Sarovar, Kolkata.**
2019 Analyzed, visualized and gained valuable insights from data.
- Sep., 2018 **Key-note Speaker, (sponsored by Google), MLCC-SXC, St. Xavier's College, Kolkata.**
Created course work and delivered lectures for Machine Learning Crash Course seminars.
- Nov. 2017 – **Developer, Xavotsav 2018 Website, Designed a website for the cultural fest of St.**
Jan. 2018 *Xavier's College, Kolkata, with our team.*

Selected Open Source Softwares

- Feb 2019 **Jimutmap** *A tool to download satellite images and road maps with ease.*
o Used for testing deep learning algorithms. Over **Over 20K total downloads from python3-pip package.**
- Jan. 2019 **Jimner** *Create ASCII Art writing for terminal.*
o Generated banner of **314 samples** of styles using Python-3.
- Nov. 2018 **Management Information System: A CRUD (Create Read Update Delete) system built using Python3 and Tkinter from scratch.**

Leadership

- Aug. 2018 – **Coordinator & Teacher, National Service Scheme (NSS)** – Coordinated and organized
Jan. 2019 tours (four times) for educating the unprivileged in a nearby village. This was part of curriculum (social work) at St. Xavier's College, Kolkata.
- Feb 2019 **Event Head of ENIGMA** – Planned, organized and executed the annual coding event of Science Association, St. Xavier's College, Kolkata.

July – Sep., 2018 **Head of Graphics Design Team**, *Analytica (Dept. of Mathematics)* – Lead and planned a team of 5 highly motivated designer to create and design all the graphics content that were used at the event in St. Xavier's College, Kolkata.

Online Specializations

Dec. 2019 **Deep Learning Specialization**, *DeepLearning.AI*, Coursera - License: TUKRVHKG2SJW.
March 2019 **TensorFlow in Practice Specialization**, *DeepLearning.AI*, Coursera - License: 88P8SNNTEFTH.
Sep. 2018 **Applied Data Science Specialization**, *IBM*, Coursera - License: K36A43C6J3N7.
Jan. 2018 **Python for Everybody Specialization**, *University of Michigan*, Coursera - License: RQHE57YQZ2ZW.

Miscellaneous

June 2019 – Documented **blogs** during free time. Maintained a page for PDF writings.
2017 – 2018 Created several **games** during B.Sc. in St. Xavier's College. The games can be played online from Projects page.
Jan. 2016 Selected in the second phase of **Service Selection Board (SSB), Indian Army**.

References

On Request.