

Nidita Roy

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in NIDITA ROY

🎧 Nidita

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Education

Fall 2025 (starting)

📖 **University of Victoria, Canada** Cumulative GPA: 8.50/9.00. Completed graduate coursework in Data Mining (A+), Systems for Massive Datasets (A+), Deep Learning for Medical Imaging Analysis (A+), Research Skills and Online Learning (A-); Master's thesis in progress. (Coursework done)

Experience as TA

Teaching Assistant — CSC 111
Fundamentals of Programming
with Engineering Applications

📖 (Fall 2025 – Spring 2026), where I conducted 2 lab sections per week in Fall 2025 and 2.5 lab sections per week in Spring 2026, supported students in understanding core programming concepts and engineering applications, graded midterm and final examinations as well as lab work, held regular office hours and assisted with exam invigilation.

Teaching Preparation &
Professional Development

📖 Completed **New Employee Orientation: Privacy, Information Security and Records Management** and **CSC Teaching Support** training, preparing for instructional assistance, student support, academic and industrial responsibilities.

Research Experience

Thesis Work of Bsc & Publication

📖 🔗 [Spinal Disease Detection via Deep Multimodal Fusion of X-ray Imagery and Demographic Features \(2026\)](#)

- This thesis used a deep learning method for identifying eight spine conditions using X-rays and demographic data, achieving high accuracy through a multimodal approach, followed by segmentation.

Journal-Publication

📖 🔗 [Model for Patient Survival Outcomes in Palliative Care Using Actigraphy Data and Clinical Information \(2023\)](#)

- (Journal: cancers, SJR: **Q1**, Impact Factor: 6.575)
- Developed a deep learning model integrating wearable sensor data and clinical information to predict survival outcomes in palliative care patients, achieving 92.4% accuracy. Compared model performance against traditional prognostic tools like KPS and PPI.

📖 🔗 [Deep Learning for Wound Tissue Segmentation: A Comprehensive Evaluation using A Novel Dataset \(On Review\)](#)

- Worked on a novel dataset and compared how patch-based, super-pixel based and segmentation model work on a new dataset of ulcer tissues. Mostly worked on exploring the literature works and coding implementation as the second author.

Research Experience (continued)

Conference-Publication



[🔗 Enhancing Offensive Bengali Social Media Meme Detection: A Weighted Ensemble Architecture for Predicting Type and Target Classes \(2023\)](#)

- Conference- 26th International Conference on Computer and Information Technology (ICCIT)
- Developed a weighted ensemble of multimodal models for classifying offensive Bengali memes, achieving a weighted f1-score of 71.84% in fine-grained classification. Created and utilized the Multi-modal Offensive Memes Bengali Dataset (MoMBD) with 3662 memes for this research.

Current Research Work

(Supervised by Dr. Ashery Mbilinyi)



- Context-Aware HU Adaptation for Continual Trauma Injury Detection in CT Scans by learnable windowing technique.

Skills

Programming Language	C, C++, PHP, Python, Java
Databases	MySQL
Web Design	HTML, Css
Frameworks	KERAS, TENSORFLOW, OPENCV, BOOTSTRAP, FLASK
Tools	Microsoft Excel and Word, Powerpoint, $\text{\LaTeX}$, Prairie Learn
Language Skills	Bengali (MOTHER TONGUE), English IELTS SCORE 7 (L: 7.5, R: 7, W: 6.5, S: 6)

Projects

🔗 Children Cloud	Day-care booking system using PHP, HTML, Css, Bootstrap, MySQL, Javascript
🔗 Diabetes Prediction	Predicting diabetes level of users using Flask, PHP, HTML, Css, Bootstrap
🔗 Chat-Site	Chatting website using MySQL, PHP, HTML, Css
🔗 CGPA Calculator	CGPA calculating website using PHP, HTML, Css
🔗 Recipe Website	Recipe website using HTML, Css, Bootstrap

Achievements

📖 Awards

- **8th** in Sentiment Analysis of Code-Mixed Text and **7th** in Multimodal Sentiment Analysis in 2nd International Workshop on Computational Linguistics & Bangla Language Processing (2023)
- **1729** in Google Codejam I/O for Women (2021)
- Open source contributor at Hactoberfest 2021
- **9th** in EDU Inter University Programming Contest (2020)
- **21** in USTC Programming Contest (2020), **Best Girl Programmer** In Bdson October Coder-ace(2020)
- **4th** in Intra University Programming Contest (2019)
- **40th** in National Girls' Programming Contest (2019)

📖 Training

- Finished an industrial attachment at RedDot Digital Ltd, working on image processing to classify and separate good and bad tobacco leaves (2023)
- Completed 10 days training on AI and Machine Learning with Python (2022)

Co-Curricular Activities

CUET Computer Club

2023-2024

📖 Vice President

- Led the team in organizing the national CUET Inter University Programming Contest, managing logistics, coordination, and execution, organized 2 workshops (Programming Bootcamp and Machine Learning), 1 seminar (Web Development), 2 Intra University Programming Contests, and facilitated the recruitment of software and quality assurance engineers for Dynamic Solutions Innovators Ltd., Dhaka
- Mentored in a workshop on Research Methodology and Feature Engineering in Machine Learning, guiding participants through key concepts and practical applications

2019-2023

📖 General Member

- Worked as part of a team in approximately 20 events and received the 'Best Contributor' certification at a national event for exceptional contributions
- Mentored and supervised juniors in developing their programming skills during the 'CUET Competitive Programming Workshop'

Microsoft Learn Student Ambassadors

2021

📖 Volunteer

- Reached the Alpha milestone, engaging in community-building activities and promoting learning initiatives