

NABANITA DASH

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[Mail](#) ◊ [LinkedIn](#) ◊ [GitHub](#) ◊ [GitLab](#) ◊ [Kaggle](#) ◊ [Portfolio](#) ◊ [Twitter](#)

EDUCATION

Bachelor of Technology, International Institute of Information Technology, BBS, India 2017 - 2021
Major in Computer Science and Engineering **7.24/10.0 (Grade A)**

Elementary to Senior Secondary school, Ispat E.M. School, Rourkela, India 2005-2017
Mathematics, Physics, Chemistry, English, Computer Science **97.6% (Grade A+)**

PUBLICATIONS

CONFERENCE PROCEEDINGS

[RE] A Reproducibility Study on Scene-Graph Generation from 3D Point Clouds: Hybrid Approach with Clip, 2D Image Semantics, and 3D Geometry [GitHub code](#)

Nabanita Dash

(in submission to TMLR (JMLR journal) and MLRC2023)

Author, Parallel and Distributed Computing with Julia for data science [Book website](#)

Nabanita Dash

OrangeAVA Publications

Digital Forensics Research on Cloud Computing [ResearchGate](#)

Nabanita Dash, Priya Pandya

RESEARCH EXPERIENCE

Research Engineer Dec 2022 - Jan 2024
Antimodular Research *Montreal, QC*

- Developing artworks using **deep learning, computer vision, large language models** by analyzing voice, text and 2D and 3D data and models by using **PyTorch, Tensorflow, Huggingface, Langchain** interface
- Developing frontend and backend applications using javascript, nodejs, express, vuejs and deploying the application by creating server side linux/linode server

GitHub contributions

MLPack Jan 2022 - May 2022

- **Developed and implemented machine learning models in C++**

OpenMined May 2021 - Oct 2021

- Led research on **differential privacy algorithms** and data within the **OpenMined** framework, demonstrating a strong commitment to privacy-preserving machine learning.
- Resolving issues and implementing fixes in **PyBind and PyDP** codebase

Julia Oct 2019 - May 2021

- Interned at Major League Hacking (GitHub), developed a ML package for **auto-adjustment of brightness using Julia Language and SciML** within 3 days of hackathon
- **Developed FluxModels.jl which contains most of the vision, language, machine learning and deep learning models in Julia**
- Integrated a plot feature into the AutoMLPipeline.jl package and established the foundational **framework for a gaming platform** during the MLH hackathon.

Visiting Researcher (remote work)
Seoul National University

January 2021 - May 2021
Seoul, South Korea

- **Research on smartphone forensics data** using different applications
- **Analysis and automation of the tiktok and facebook app data analysis** to check for safety issues and data leaks

ENGINEERING EXPERIENCE

Full Stack Developer
Julia Computing Incorporation

May 2021 - April 2022
Bengaluru, India

- **Designed and implemented robust data management pipelines**
- **Created web frontend and backend features in JuliaHub**, demonstrating versatile skills in **full-stack development within the Julia ecosystem**, and troubleshooting and bug fixing existing installations.

Data Analyst (Part-time freelancing)
Decimal Space

September 2020 - October 2020
Gurgaon, India

- Research on **object detection with Mask R-CNN** and implementing them on video frames from dropbox

Data Scientist intern (Remote work)
PredictivEye Incorporation

March 2020 - May 2020
Toronto, Canada

- Utilized Google Analytics and AdWords to analyze campaigns, predict website visits, and led initiatives for CTR and impressions budget optimization and forecasting.

Analyst, Data Science (Remote Volunteer work)
Varidus Scaling Innovation

October 2019 - January 2020
Singapore

- Created a robust dataset on startup growth, IPO, and Mergers and Acquisitions through web scraping, performed sentiment analysis, and developed a predictive model on AWS Sagemaker, EC2 instances, and Google Colaboratory.

PROJECTS

Face Detection Developed a face detection model that can classify gender, age and emotion of a person

Chatbot using RASA NLP Developed an interactive chatbot for answering questions and giving assistance for a startup using rasa NLP

Sketching images using RNNs Developed Encoder-Decoder model to learn from sketch strokes, redraw images using Python, Tensorflow with accuracy of 82.6%. Low quality sketch-strokes, blunt-edges were major challenges.

Style transfer Developed a model that can create new images by mixing abstractions and outlines of one image and colour and styling of another image with better optimization techniques using Python,Pytorch framework, which achieved an accuracy of 85%.

MNIST Autoencoder Developed Simple Autoencoder, Sparsity Autoencoder model that learns from modified MNIST and reproduces digit images using Python, Keras framework, achieved an accuracy of 97%.

Twitter Sentiment analysis using RNNs Developed a model that scrapes data from Twitter and predicts the emotional belief of users using bag-of-words, LSTM techniques in Python which achieved an accuracy of 96.2%.

COURSES AND SKILLS

Stanford's Machine Learning on Coursera (Andrew Ng), MIT's Introduction to Deep Learning on edX, Computer Vision on Coursera (University of California, Irvine), TensorFlow, PyTorch, Flux, NumPy, Pandas, Scikit-learn, Huggingface, Linear Algebra, Natural language processing, Parallel Computing

LEADERSHIP

- **GitHub Campus Expert'20** - contributing to the global tech community through expertise in Git and collaborative development practices.
- **Core Mentor at Girlsript, Bhubaneswar** - fostering technical skills and mentorship for aspiring students in the field of technology.
- **Google Code-In mentor at Julia, 2019** - guiding and supporting young contributors in open source projects related to the Julia programming language.
- **Head of Programming Society at IIIT, BBS, India** - leading initiatives to promote coding skills and programming culture among students.
- **Chair of ACM Student Chapter, Bhubaneswar** - overseeing activities and events to promote computer science education and professional development within the student community.