

Pratik Karmakar

Pursuing MSc. Big Data Analytics ||
Electrical Engineering grad || Ex-
Vedanta Aluminium Ltd.

An avid and fast learner, eager problem solver and an enthusiastic team player looking for Data Science and Data Analytics roles.



pkpratikkarmakar@gmail.com

+91 6290517961

Kolkata, India

linkedin.com/in/pk-pratik-karmakar

github.com/pratik2358

EDUCATION

MSc. Big Data Analytics

Ramakrishna Mission Vivekananda
Educational and Research Institute

09/2020 - Present

9.15

Courses

- Optimization for Machine Learning
- Multivariate Statistics
- Machine Learning
- Natural Language Processing
- Optimization Algorithms
- Computer Vision
- Linear Algebra
- Online learning

BE in Electrical Engineering

Jadavpur University

08/2014 - 06/2018

8.58

Courses

- Signals and Systems
- Control Systems

10+2

Barrackpore Govt. High School, WBCHSE

06/2011 - 06/2013

85.4%

10

Bhatpara Amarkrishna Pathsala, WBBSE

06/2010 - 06/2011

82.25%

EXPERIENCE

Assistant Manager (Operations)

Vedanta Aluminium Limited

09/2018 - 02/2019

Lanjigarh, Odisha

Achievements/Tasks

- Managed Power Plant operations and maintained analytical workflow for smoother and robust running of the process

Summer Project Intern

Defence Research and Development
Organization

05/2017 - 06/2018

Hyderabad

Achievements/Tasks

- Designed BLDC motor for Tactical Aerospace Vehicles
- Analysed basic control dynamics of Tactical Aerospace Vehicles

SKILLS

Python

R

Machine Learning

Deep Learning

Transformers

PyTorch

SciKit-Learn

Pandas

NumPy

Matplotlib

Seaborn

Neo4j

MySQL

NLTK

Docker

Computer Vision

PROJECTS

Designing and understanding fundamental limits of online privacy attack (Under supervision of Prof. Debabrota Basu, INRIA, France) (08/2021 - Present)

- Understanding and finding upper and lower bounds of privacy and adversarial attack advantage for online learning systems
- Design of generalised attack set ups to encapsulate Membership Attack, Attribute Attack and Reconstruction attack

Application of Barlow Twins to train an encoder for NLP classification tasks using Self Supervised Learning (Jointly with Sayan Nag, Phd Student, University of Toronto and Dibyendu Das, MSc student, RKMVERI) (08/2021 - Present)

- Training an encoder in self supervised environment to encode text data into a latent space for classification task.

Optimisation Algorithms Insights (08/2021)

- Analysis of optimization algorithms used in Machine Learning and Deep learning through visualisation (in Python)

A lucid visual walk through Fourier Transform (04/2021)

- Analysis and explanation of Fourier Transform through visualization in Python

LANGUAGES

English

Full Professional Proficiency

Bengali

Full Professional Proficiency

Hindi

Professional Working Proficiency

INTERESTS

NLP

Optimization Algorithms

Computer Vision

Transformers

Online Learning

Online Privacy

Self-supervised Learning