Akanksha Singh

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Education

Indian Institute of Science Education and Research *Bhopal, India*
Ph.D, Dept. of Data Science & Engineering *July 23 – Present*
Thesis title: *Unlearning in Deep Learning Models*
Supervisor: Dr. Vinod Kr Kurmi

JawaharLal Nehru University *New Delhi, India*
Master of Technology in Statistical Computing *Dec 2020 – Feb 2023*
Thesis title: *Software Fault Detection on the basis of various Prediction Approaches*
Supervisor: Prof. V.B. Singh

Guru Nanak Dev University *Amritsar, India*
Bachelor of Technology in Computer Science & Engineering *July 2013 – May 2017*
Project title: *EmploX-Online Job Portal*
Supervisor: Dr. Satinder Kaur

Experience

Policybazaar Insurance Brokers Pvt Ltd. *Gurugram, India*
System Engineer *July 2018 – Dec 2020*
Technical Lead *April 2021 – April 2022*

Thesis and Academic Projects

Software fault detection on the basis of various prediction approaches
M.Tech Thesis *April 2022 – December 2022*

- Conducted a systematic literature review of research papers from the past two decades to identify the most preferred datasets and machine learning techniques. Based on these insights, developed a software fault detection model using a Naive Bayes (NB) classifier on the CM1 dataset.
- Accessed the publicly available PROMISE repository, conducted exploratory data analysis (EDA) on the CM1 dataset, performed feature extraction, and developed a machine learning model using a Naive Bayes (NB) classifier.
- Tech Stack: Python, scikit-learn, PyTorch.

EmploX-Online Job Portal
B.Tech Project *Jan 2017 – May 2017*

- Developed a web application that matches job applicants' information with recruiters' requirements, notifying both parties via email upon a successful match.
- Tech Stack: ASP.net, HTML, CSS, JavaScript, MySQL.

Course Projects

Pixel-and Patch-wise Self-supervised Learning for Domain Adaptative Semantic Segmentation

- Implemented a self-supervised learning approach that leverages both pixel- and patch-level features to enhance domain adaptive semantic segmentation using intra-domain invariances from datasets Cityscapes and Synthia on GTA.

Exoplanet Orbital Semi-Major Axis Prediction:

- Implemented regression model that can predict the semi-major axis of exoplanet orbit using the data provided by the NASA Exoplanet Archive.
- GitHub Link: github.com/AKANKSHASINGH233/ML_PROJECT.

Technical Skills

Languages:	Python, C++, C#, ASP.NET.
Frameworks:	PyTorch, NumPy.
Drawing & Typesetting:	LaTeX
Development Tools:	Linux, Git.