Indraneil Paul

Email Github Scholar LinkedIn Website

Work Experience

04/20 - Pres. Applied Scientist , Amazon Advertising, Bangalore
- Created text, image and multi-modal models for improving EU ad moderation automation by 28%
- Researched multi-modal, multi-lingual and multi-task pre-training objectives for ad catalog tagging
- Devised sample-efficient training methods for ViT models using self-labelling and sub-task distillation

HuggingFace Transformers | PyTorch | Python | CUDA C++ | TensorRT | AWS SageMaker

07/19 - 03/20 Software Development Engineer , Amazon Logistics, Hyderabad
- Implemented a planner enabling merchants to rank options and schedule last-mile package drop-offs
- Oversaw database tuning, JVM optimizations and message queue setup for event ingestion service

Spring | METIS | Java | AWS SNS | AWS SQS | AWS DynamoDB

06/17 - 08/19 Research Assistant , IIIT-H Language Technologies Research Center, Hyderabad
- Employed temporal activity, network and Tweet-based features to characterize verified users on Twitter
- Curated a **dataset** of 235K+ verified Twitter users, containing 79M+ edges and 494M+ Tweets

Graph-Tool | FastAI | Neo4j | AllenNLP | Twitter API | PoweRLaw | Python | R

06/18 - 07/19 Research Assistant , IIIT-H Machine Learning Lab, Hyderabad
- Researched constraint-aware two-sided matching algorithms on dynamic bipartite graphs
- Explored non-manipulable preference elicitation for ride sharing drivers

ParamILS | CVXOpt | MATLAB | Python | C++

05/17 - 07/17 Google Summer of Code , Green Navigation, Hamburg
- Implemented LSTM based EV charge prediction and reduced absolute forecasting error by 39%
- Productionized Bayesian Optimization service toward optimal hyperparameter selection for models

TensorFlow | Pandas | BayesOpt | Python

Education

07/17 - 07/19 Masters by Research, IIIT Hyderabad — CGPA 8.52

08/13 - 05/17 Bachelors of Technology in Computer Science, IIIT Hyderabad — CGPA 6.85

Summer Schools

09/21 Gaussian Process and Uncertainty Quantification Summer School (GPSS)

07/21 European Summer School in Logic, Language and Information (ESSLLI)

References

Amazon Sumit Negi, Principal Science Manager — Email

Microsoft Manish Gupta, Thesis Co-Advisor — Email

IIIT Hyd Ponnurangam Kumaraguru, Thesis Advisor — Email

Publications

Sample-Efficient Training of Vision Transformers for Adversarial Ad Image Detection

KDD 2022, Washington DC — Under Review

Indraneil Paul, Sumit Negi

Prompting Language Models for Few-Shot Adversarial Text Localization in E-Commerce Ads

KDD 2022, Washington DC — Under Review

Indraneil Paul, Gaurav Rajput, Pooja A

Insights into, Analyses and Prediction of Verified Users on Twitter

Masters Thesis, IIIT Hyderabad — Abstract | PDF

Indraneil Paul

What sets Verified Users apart? Insights, Analysis and Prediction of Verified Users on Twitter

WebSci 2019, Boston — Abstract | PDF

Indraneil Paul, Abhinav Khattar, Shaan Chopra, Ponnurangam Kumaraguru, Manish Gupta

Elites Tweet? Characterizing the Twitter Verified User Network

LSGDA Worskshop, ICDE 2019, Macau — Abstract | PDF

Indraneil Paul, Abhinav Khattar, Shaan Chopra, Ponnurangam Kumaraguru, Manish Gupta