HIMANSHU DUTTA

✉ meet.himanshu.dutta@gmail.com ✉ himanshud@iitb.ac.in 📞 +91 9828647472 in himanshu-dutta ⌗ himanshu-dutta

PUBLICATIONS

EnsembleDet: Ensembling Against Adversarial Attack On Deepfake Detection, JEI, Dec 2021 - Himanshu Dutta, Aditya Pandey, Saurabh Bilgaiyan

Wrapper Based Feature Selection Approach Using Black Widow Optimization Algorithm for Data Classification, CIPR 2022, Springer, Jun 2022 - Himanshu Dutta, M.K. Gaurisaria, Himansu Das

WORK EXPERIENCE

Intern Automation Engineer

Autodesk

📅 June - Oct 2021   📍 Remote

- Worked on workflow automation and integration of various technologies.
- Collected and processed data from internal services to generate knowledge.
- Designed, developed, and deployed solutions at scale to save man-hours.

Machine Learning Fellow

Fellowship.AI   Certificate

📅 January - April 2021   📍 Remote

- Worked on real-world CV and NLP projects involving SoTA research, such as SimCLR, FixMatch, etc.
- Researched and implemented recent work relating to the project.
- Contributed to the creation and curation of data for the project, with the client.

Machine Learning Trainee

IIT Kanpur   Certificate

📅 May - July 2019   📍 Kanpur, India - Onsite

- Learned to process and use data collected from IoT devices to train ML models.
- Worked on a capstone project based on Natural Language Processing and Time series forecasting.

EDUCATION

M.Tech. in Computer Science and Engineering

Indian Institute of Technology, Bombay   📍 Mumbai, India

Guide: Prof. Pushpak Bhattacharyya
Graduation Year: 2025 (Tentative)   **Grade:** 9.63 CGPA

B.Tech. in Computer Science and System

KIIT University   📍 Bhubaneswar, India

Graduation Year: 2022   **Grade:** 9.65 CGPA

AWARDS & ACHIEVEMENTS

KIIT Merit Scholarship - Received Scholarship for performance in academics for three consecutive years.

TECHNICAL SKILLS

Programming Languages
Python, JavaScript, TypeScript, C, C++, Go, Shell Script

Frameworks & Libraries
Pytorch, FastAI, Tensorflow, Django, React JS, React Native

Software Packages & Databases
Selenium, OpenCV, MySQL, PostgreSQL

Tools, Utilities & DevOps
Github, Docker, Nginx

Cloud Platforms & Services
GCP, AWS, Firebase

PROJECTS

StackHack   Github
Pytorch | HF Transformers | Django | Language Modelling

- NLP based improvement on existing developer QA site.
- Open-ended question-answering using language-modelling.
- Semantic search based document retrieval.

SConnect   Github
Python | Typescript | Django | React Native | Deepfake Detection

- Implemented the RESTful services in Django and used Django-Channels for web-socket based chat communication.
- Implemented the cross-platform application in React Native
- Integrated deepfake detection check on media upload.

Tarantino++   Github
C++ | Sockets | HTTP Web Framework

- Created web-framework from scratch using UNIX system APIs.
- Wrote modular code for different levels of framework abstraction.
- Implemented HTTP protocol, TCP and Unix domain socket servers, etc. from scratch.

Pycoder   PyPI | Github
Pytorch | HF Transformers | Docker | FastAPI | Typer CLI

- Created a CLI tool to generate Python code from a set of topics and a description string.
- Used GPT2 model to frame the problem as a conditional Causal LM task.
- Collected, transformed and ingested data from scratch.
- Wrote reusable code for others to use and published a Python package.

MBC App   Article | Github
Pytorch | Torch-Serve | React Native | YOLOv5 | Selenium

- Created a cross-platform application(iOS, Android) to detect food ingredients from images and suggest recipes based on them.
- Designed end-to-end pipeline from the collection of data from web, to object detection using YOLOv5 to finally model serving using torch-serve.
- Wrote frontend application using React Native and endpoint using torchscript.