Jyotirmay Khavasi

✉ jyotirmay.khavasi@gmail.com | ▢ (+91) 9987540788 | in Jyotirmay Khavasi | ⌂ theory-in-progress | My Webpage

I Aspire to be a Computer Scientist with a specialization in Artificial Intelligence and Machine Learning. I have a Strong ability to collaborate and work in a team environment. My broad research Interests are in the field of Graph Theory, Machine Learning, Deep Learning and Neural Networks.

EDUCATION

Vishwakarma Institute of Information Technology   Pune, India | 2020 - Present
B.Tech in Artificial Intelligence and Data Science - CGPA - 9.41

SKILLS

Languages: C++, Python, R
Scientific Libraries: Numpy, Pandas, PyTorch
General Tools: Git, LaTeX, Vim, MySQL, MongoDB, Shell, Assembly
Web Development: Node.js, Django, JavaScript, HTML, CSS

WORK EXPERIENCE

HCL TECHNOLOGIES | Research Intern   Pune, India | Sep 2022 – Current

- Working on a NLP Model which extracts Rules from given Text. Software converts and Processes Given Text to output the Mathematical Expressions of the Rules.
- BERT is used for Named Entity Recognition, Random Forests is used Classification if a given sentence is Rule or not Rule by Custom Tagging, this is enabled by Information retrieval by TF-IDF.
- Custom Parse Trees Convert the Rule from the BERT model to a Logical Mathematical Expression.

PROJECTS

MOVING OBJECT DETECTION   OpenCV
The program aims to detect Moving Objects by comparing the difference of the contours of the previous frame and the current frame, uses absolute difference of the first frame and the Gaussian Image generated.

CUSTOMER SEGMENTATION   Unsupervised Learning, K-Means Clustering
Implemented the K-Means Clustering Algorithm from scratch without using any Scientific Libraries. Segmented the Customer Data into 5 clusters using Unsupervised Learning with the Knowledge of Matrices and programming in Python.

MOVIE TICKET BOOKING SYSTEM ⌁   Python, Django, MySQL, WebApp, HTML, CSS
Developed a WebApp using Django in Python. Implemented Backend Connection using MySQL Database. Integrated the frontend with the Backend seamlessly

OPENSOURCE CONTRIBUTOR TO PYTORCH-IGNITE ⌁   Python, Deep Learning, Neural Networks
Active Contributor to the Pytorch Ignite Open Source Library which helps in training and evaluating neural networks.

TODO APP API   Docker, Dockerfile, Python, API, REST
Built a REST API app exposing the end points. Users can log in and make API Calls. Containerized the application and deployed it using Docker

EXTRACURRICULAR

CYBERCELL, VIIT | Head of Reverse Engineering   Pune, India | Feb 2022 – Current
Successfully Conducted, Supervised and Created Reverse Engineering Questions as Head of Reverse Engineering in CyberCell, VIIT for VISHWA CTF 2022. Flag Checker was one of the least solved questions in the 48 hours of the CTF.

COURSEWORK PROJECTS   C++, JS, Socket Programming

- Created a Hospital Management system website using Agile Software Development and SCRUM.
- Used TCP/IP Protocol and Socket Programming to send messages and Files from the Client to Server.

COURSEWORK

Discrete Mathematics	Operating Systems
Probability and Statistics	Database Management
Data Structures	Software Engineering
Computer Organization	Data Visualization

MOOC

INF8245E - Machine Learning: Chandar Research Lab Math Intensive, Rigorous introduction to the field of Machine Learning. Use of ML algorithms, how and when the algorithms work.