Kaustav Ghosh

CSE Final year undergrad,MIT,Manipal

Interests: Artificial Intelligence and Robotics

teetangh@gmail.com

+91-8800441954

Gurgaon, India

linkedin.com/in/kaustav-ghosh-1538651bb

github.com/teetangh

LANGUAGES, LIBRARIES AND FRAMEWORKS

Python | C/C++ | Java | Latex | Verilog | Linux Shell Scripting | Numpy | Pandas | Scikit-Learn | Tensorflow | Pytorch | OpenCV | ROS

SOFTWARE

AutoCAD | Matlab | Keil | Altera MaxPlus | VirtualBox | VMWare | GNS3

EDUCATION

BTech in Computer Science & Engineering
Manipal Institute of Technology

06/2018 - Present *8.51/10*

WORK EXPERIENCE

Software Engineer Intern, IoT Products & Analytics
Samsung R&D, Bangalore

06/2021 - 07/2021 *Bengaluru*

Developed and implemented MQTT bridge functionality in Moquette, an open-source lightweight Java MQTT broker

Achievements/Tasks

- Awarded Amazon Gift Voucher by Principal Engineer for completing the task in approximately half the deadline

Machine Learning Intern
Microsoft Student Partners

04/2020 - 05/2020

Guided a team of 10 individuals to collaborate and accomplish a Regression task of price prediction of used cars in a machine learning pipeline through Exploratory Data Analysis,Feature Engineering and Model Building.

Data Analytics Intern
TakenMind Technologies

05/2020 - 05/2020

Worked on analyzing Industrial Data, predicting and presenting trends, using techniques such as Exploratory Data Analysis and Data visualization using Matplotlib and Seaborn. Implemented several bar plots, heatmaps, etc on several datasets. Implemented Machine Learning Algorithms (such as Random Forests).

Achievements/Tasks

- Obtained 87% test accuracy.

RESEARCH WORK

Samsung PRISM - Intelligent Ranking for Dynamic Restoration of Next Generation Wireless Networks (09/2020 - 03/2021)

Implemented Machine Learning algorithms and Feature Engineering techniques to predict KPI values for eNodeB-s and consequently a ranking system to orderly restore them during network failure.

PERSONAL PROJECTS

Compiler Front-end for subset of C-Language

- Coded a Lexical Analyser that extracts tokens from a C source file and a Symbol Table Generator to store information of identifiers and functions and a Recursive Decent Parser that semantically parses the grammar for subset of C-Language by analysing the tokens generated by a Lexical Analyser

Mini Games based on Backtracking

- Coded a Crossword Solver that takes a 10*10 grid and word list and outputs a grid with the words accurately filled.
- Coded a Sudoku Solver that takes a partially filled 9*9 Sudoku grid and outputs a solution so that every row, column, and nine 3x3 sub-grids contains exactly 1 instance of the digits from 1 to 9.

Finland Labs & IIT Roorkee - Time Series Forecasting, Data Analysis and Web Scraping

- Prepared a complete Data Analysis report on the World-wide COVID-19 attack statistics and used the Facebook's fbprophet Time-series Forecasting library to speculate the number of active corona victim cases in the upcoming days.
- Created neural networks from scratch which facilitated in implementing a machine learning model to recognize the function of an XOR gate without explicitly being programmed.
- Trained a Deep Learning model with TF2 and Keras API for MNIST Handwritten digit Recognition.

Machine Learning and Deep Learning Algorithms Implementations

- Implemented basic machine learning algorithms such as Linear Regression, K-Nearest Neighbours, Logistic Regression, K-Means Clustering from scratch without existing machine learning libraries.Implemented few gradient descent algorithms

Kaggle - Advanced House Price Prediction Regression Techniques

- With 79 explanatory variables describing (almost) every aspect of residential homes in Ames, Iowa, applied feature engineering and machine learning techniques to predict the final price of each home