

SWARNA DEEP SARKAR

Course: B.Tech, Computer Science and Engineering, 2021

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CADEMIC DETAILS						
COURSE	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	SCORE	YEAR		
CLASS X	Haldia St. Xavier's High School	West Bengal Board	85 %	2015		
CLASS XII in Computer Science & Engineering	Haldia St. Xavier's High Secondary	CBSE	69 %	2017		
B.Tech	SRM Institute of Science and Technology - Ramapuram Campus		85.67 %	2021		

Subjects / Electives	
Technical Proficiency	Node.js, React.js, Front-End Web Development, Tkinter, Object Detection, Express.js, Web Crawling, OpenCV, JavaScript, Database-driven Web Applications, Web Application Development, Web Development, Python, NumPy, Pandas, AJAX

SUMMER INTERNSHIP / WORK EXPERIENCE

Industrial Training, Indian Oil Corporation Limited

Dec 2019 - Dec 2019

May 2020 - Present

Mar 2020 - Present

PROJECTS

Friendex - Web Development

Source Code: https://github.com/sarkarsd/friendex

Website: https://epic-shirley-ef3923.netlify.app/

My Portfolio - Web Development

Its my portfolio showcasing some of my projects.

Visit my Portfolio: https://laughing-fermi-854a11.netlify.app/

Motion-Detector - Python Development (OpenCV)

A Python Program to detect moving objects. Made using OpenCV.

Source Code: https://github.com/sarkarsd/Motion-Detector

Campaign Sign-up - Web Development

Sep 2019 - Sep 2019

Oct 2019 - Nov 2019

A simple campaign-sign-up to save environment. New 'Sign-in's would recieve a confirmation email in the email they signed up with.

Source Code: https://github.com/sarkarsd/campaign-sign-up

Books Record - Python Development (Tkinter)

Aug 2019 - Aug 2019

A simple Python Application to manage book records, with their title, author-name, year and ISBN. It involves a basic GUI made using Tkinter and a backend database managed using SQLite3 module. Click to download.

Source Code: https://github.com/sarkarsd/booksRecord.git

CERTIFICATIONS		
CERTIFICATION	CERTIFYING AUTHORITY	DESCRIPTION
RESTful API with HTTP and JavaScript	Coursera	What I learnt: The architectural style of RESTful API and how it is implemented in JavaScript and HTTP Develop websites that use RESTful API to communicate with other systems Skills learnt: Html Ajax (Programming) Representational State Transfer (REST) JavaScript web application development
Programming in C++	NPTEL - IIT Kharagpur	Completed the course with a score of 100%

CERTIFICATIONS	ICATIONS		
CERTIFICATION	CERTIFYING AUTHORITY	DESCRIPTION	
Programming, Data Structures and Algorithms Using Python	NPTEL - IIT Madras	I completed the certification with a score of 75% and a silver medal. Skills I learned: Python Programming Language Data Structures Algorithms	
Crash Course on Python	Google	This course program is offered by Google . What I learnt from this course: Understand what Python is and why Python is relevant to automation Understand how to use the basic Python structures: strings, lists, and dictionaries Write short Python scripts to perform automated actions Create your own Python objects Skills learnt: Basic Python Data Structures Fundamental Programming Concepts Python Programming Object-Oriented Programming (OOP)	
The Complete Web Developer in 2020: Zero to Mastery	Zero To Mastery Academy	Skills leamt: HTML/HTML5 CSS/CSS3 Responsive Design Flexbox CSS Grid Bootstrap 4 DOM Manipulation Javascript (including ES6/ES7/ES8/ES9/ES10) Asynchronous JavaScript HTTP/JSON/AJAX React Git + Github Command Line Node.js Express.js NPM RESTful API Design PostgresSQL SQL Authentication Authorization Scalable Infrastructure Security Production and Deployment	
Using Python to Interact with the Operating System	Google	What I learnt: Setup, configure, and use your own developer environment in Python Manipulate files and processes running on the Operating System using Python Understand and use regular expressions (regex), a powerful tool for processing text files Know when to choose Bash or Python, and create small scripts using Bash Skills learnt: Automating System Administration Tasks with Python Testing in Python Regular Expression (REGEX) Bash Scripting	

PUBLICATIONS

One of the most important activities in the finance world is stock trading. Stock Market Prediction is the process of ascertaining the price of a stock or another financial object traded at an exchange in advance. Such a task can be accomplished with good accuracy using Machine Learning. This paper tends to illustrate the process of stock price prediction using Machine Learning models. This problem includes modelling the past study of a stock's historical data. This model is then used to predict its price in the future. The prediction is given in the form of a range with an upper limit and a lower limit which represents a safe zone for investors. This method uses a technique called Monte Carlo Simulation along with a time series forecasting method called the ARIMA model to predict the price intervals. We have collected a data-set of stock market prices from last year. It was processed before the actual analysis. Then we applied Monte Carlo Simulation on it and analyzed the outcome it generated. In addition, we also examined the usage of this prediction system in real world settings and addressed some of its issues, accuracy as well as some ideas to further improve it.

PDF: http://sersc.org/journals/index.php/IJAST/article/view/8252/4692

Credit Card Fraud Detection Using Machine Learning and Data Science

Journal name: INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT) | Publication date: Sep 13, 2019 It is vital that credit card companies are able to identify fraudulent credit card transactions so that customers are not charged for items that they did not purchase. Such problems can be tackled with Data Science and its importance, along with Machine Learning, cannot be overstated. This project intends to illustrate the modelling of a data set using machine learning with Credit Card Fraud Detection. The Credit Card Fraud Detection Problem includes modelling past credit card transactions with the data of the ones that turned out to be fraud. This model is then used to recognize whether a new transaction is fraudulent or not. Our objective here is to detect 100% of the fraudulent transactions while minimizing the incorrect fraud classifications. Credit Card Fraud Detection is a typical sample of classification. In this process, we have focused on analysing and pre-processing data sets as well as the deployment of multiple anomaly detection algorithms such as Local Outlier Factor and Isolation Forest algorithm on the PCA transformed Credit Card Transaction data.

PDF: http://dx.doi.org/10.17577/IJERTV8IS090031

PERSONAL DETAILS				
Date of birth: 10 October 1999	Father's name: Mukul Kumar Sarkar			
Permanent address: P-149, OxyTown, Sarsuna, Kolkata, Kolkata, Kolkata, West Bengal, PIN - 700061	Languages known: English, Bengali, Hindi			
Permanent contact number: 9800317701	Nationality: India			
Passport availability: false				