Swetha Saseendran

Final Year Computer Science Student

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in Swetha Saseendran   ⚬ swetha4444   ⬈ Tableau Profile

⚛ ABOUT ME

As a self-driven individual with good inter-personal skills, can easily adapt to any work environment, open for exciting roles and have a fascination for **Data Science**. I have familiarity in areas of **Data Visualization** and **Web Development**.

🎓 EDUCATION

B.E Computer Science, *SSN College of Engineering*
2018 – 2022
- **Reg No.: 185001183**
- **CGPA: 8.86/10**
- ACM Alumni Relations Head
- Member of the Photography Club, Youth Red Cross Club and Film Club.

12th Grade, *PSBB KK.Nagar*
2017 – 2018
Cutoff: 190.5/200 (MPC)
(Total percentage: 93.5%)

10th Grade, *PSBB KK.Nagar*
2015 – 2016
- CGPA: 9.6/10
- Road Safety Patrol Organization Member
- Part of the Female Football Team

🧠 SKILLS

Data Science:
- BI Tools: Tableau, Power BI
- Libraries: Keras, Tensorflow, Scikit-learn, OpenCV, NLTK
- Deployment: Flask, Streamlit
(Key Certification : GSDC Certified Full Stack Data Scientist)

Web Development:
- Front-end: React JS,HTML5, CSS3, JavaScript, Bootstrap
- Back-end: NodeJS, PHP (Basic), Apache Tomcat
- Data Base: MySQL, MongoDB
- Version Control: Git and GitHub
- Android Development: Java

Programming Languages and Concepts:
Python, C, Java,C++ (Basic), Data Structures and Algorithms

💼 PROFESSIONAL EXPERIENCE

Data Science Intern, *First Insight*   Jul 2021 – Dec 2021
- Built an Aspect Based Sentiment Analysis Model, topic modelling using LDA and BERT Transformers for sentiment analysis and optimized LDA using data wrangling techniques.
- Automated sentiment analysis integrated with word search to perform sentiment analysis on the reviews related to the given keyword and similar words.
- Created a Flask API to deploy the sentiment analysis model.

CV Research Intern, *OYOBO Sports*   May 2021 – Aug 2021
- Researched to build Computer Vision based motion technology to analyse the bio-mechanics of a sports person.
- Built computer vision solutions for Pose recognition, BMI based motion analysis, Rep count and other use-cases using OpenCV and Mediapipe.
- Deployed the models using Flask API to integrate with React Native Application.

Full Stack Developer Intern, *GUVI Geek Network Private Limited*   Feb 2021 – Mar 2021
Worked alongside other developers to implement an online learning and teaching marketplace site using HTML, CSS, jquery-ajax,Bootstrap, PHP and MySQL.

🗂 PROJECTS

Pose recognition and replication, *(Computer Vision and AI)* ⬈
An animated visualization of a robot built using OpenCV, TKinter and Mediapipe in Python that tracks and imitates your body movement in real-time.

Covid Social Distancing and Mask Detection, *(Computer Vision)* ⬈
- A Computer Vision program built to detect if people are maintain proper distance as per norms and wear their masks. Built on OpenCV, YOLO and can be integrated to work with CCTV footage.
- Presented the project in ZENITH 2021, an event organized by Tech Club of the Department of ECE in SSN College in association with IEEE and IETE.

Image Compression using Convolutional Autoencoders and K-Means Clustering, *(Image Processing)* ⬈
An application in Flask to compress images using K-Means and Autoencoders and denoised the image to restore its quality.

Resume Parser and Analyser Software, *(NLP)* ⧉

A application built on Flask that parses the resume and , summaries (DistilBERT) the resume and performs data analysis. A deep learning CNN model is also deployed in the software that gives a resume based job recommendation.

Expense Tracker, *(MERN Stack)* ⧉

A MERN Stack application that helps to keep an accurate record of money inflow and outflow and provides graphical insights through data analysis. Built using React JS, Node JS, Mongo DB and Chart JS.

Twitter Product Analysis, *(NLP)* ⧉

An application built using Flask that intends to help the user determine and analyse the reviews of the product posted in twitter using state-of-the-art techniques in real-time. BERT Transformers deployed for sentiment analysis.

Payroll Management System, *(Python Web Development)* ⧉

A database management software for managing employee's payroll. It's designed to organize all the tasks of employee payment and calculating wages, deductions. Created using **HTML, CSS, Python (Django)** and **MySQL**.

Other Projects ⧉

⚙ OPEN SOURCE CONTRIBUTION

PyTrackX,

A general python framework for visual object tracking
PyTrackX is a Python package that serves as an automated tool which tracks different objects and body movements as per user requirement and returns the real-time coordinates with very less steps and a simple video input. ⧉

📖 EXTENDED STUDIES

- **Udemy**- Machine Learning A-Z: Hands-On Python In Data Science
- **Udemy**- Deep Learning A-Z: Hands-On Artificial Neural Networks
- **Coursera (by University of California, Davis)** - Fundamentals of Visualization with Tableau (audited)
- **Coursera (by John Hopkins University)–** Data Science Fundamentals
- **Udemy–** The Complete 2021 Web Development Bootcamp
- **IIT Wokshop-** Business Analytics
- **SSN College of Engineering**- NLP Workshop

🌐 LANGUAGES

English | Tamil | Hindi | Telugu

📰 PUBLICATIONS

S. Saseendran, S. R, S. V, S. Giri, **Classification of Hate Speech and Offensive Content** using an approach based on DistilBERT, in: Forum for Information Retrieval Evaluation (Working Notes)(FIRE), CEUR-WS.org, 2021. **(Accepted. Yet to be published)** ⧉

🏅 CERTIFICATIONS AND ACHIEVEMENTS

- **GSDC** ⧉ **Certified Full-Stack Data Scientist** (Certified Machine Learning Master + Certified Business Analyst + Certified DevOps Engineer)
- Completed **Darshin Bharat Hindi Prachar Sabha** Hindi Examinations with a **Pandit Degree**.
- Completed the examinations under **Bal Vikas** organization and recieved a **diploma degree** at Puttaparthi, Andra Pradesh.
- **Elite certificate** in **NPTEL** examination for the **Social Networks** course taught by IIT Ropar.
- MLCertific ⧉ Certified **MLOps Associate**.

🎯 INTERESTS

Photography | Violin | Singing | Yoga