UTKARSH PRAKASH SRIVASTAVA

1326 2, 79th St, Brooklyn, New York, USA, 11228
ups2006@nyu.edu +1(347)206-5099 utkarsh-ps.me GitHub: utkarsh231 LinkedIn: utkarsh-ps

Education

New York University, New York — **New York, USA**
Computer Engineering M.S. — Sep 2023–May 2025
Sikkim Manipal University, Gangtok — **Sikkim, India**
Computer Science and Engineering B.Tech. - 3.7 GPA — Jun 2019–Jun 2023
Minor Specialisation - Artificial Intelligence
Activities: Core Member AI team GDSC, Treasurer, Webmaster and Advisory Board Member IEEE SMIT SB.

Experience

Technocolabs Softwares — **Indore, India**
Data Science Intern — Aug 2021–Sep 2021

- Collaborated within a team of four to develop and deploy a Machine Learning Model focused on market volatility prediction and the creation of trading strategies. This involved analyzing and correlating data obtained from Reddit's WallStreetBet community, utilizing the neural network algorithm for enhanced predictive capabilities.

Projects

An AI-Powered Skin Classification Tool — Jan 2023–May 2023

- Led a project focused on developing an AI-powered Skin Cancer Classification Tool utilizing the MNIST:HAM 10000 Skin Cancer dataset, comprising 10,000 images across 7 classes. To enhance the dataset's effectiveness, we expanded it to include a total of 40,000 augmented images.
- Conducted extensive experimentation with deep learning algorithms, including transfer learning, on both balanced and imbalanced datasets. Identified the best-performing algorithm for accurate classification of skin cancer with 87.89 accuracy %
- Implemented a simple and user-friendly graphical user interface (GUI) to facilitate easy detection and classification of different types of skin cancer. Ensured accessibility for users of all age groups by integrating the GUI with the most effective model.

Faced Recognition Based Attendance System — Dec 2021–May 2022

- Led a team in creating a Face Recognition Based Attendance System using Flask framework, enabling accurate attendance marking through facial recognition technology.
- Developed a robust ML model to identify and mark students' attendance based on their facial characteristics, streamlining the process for teachers.
- Implemented a secure backend database and intuitive user interface with features like login, teacher/student pages, and downloadable attendance records, ensuring a comprehensive and user-friendly experience.

Skills

Expert: Python, Machine Learning, Neural Networks, CNN, Biomedical Image Analysis, Data Analysis
Proficient: C, Natural Langauge Processing, Java, HTML
Novice Android Studio, MATLAB

Publications

- Ghosal, P., Kumar, A., Kundu, S.S., **Srivastava, U.P.**, Datta, A., Deva Sarma, H.K. (2022). AUTCD-Net: An Automated Framework for Efficient Covid-19 Diagnosis on Computed Tomography Scans. In: Deva Sarma, H.K., Piuri, V., Pujari, A.K. (eds) Machine Learning in Information and Communication Technology . Lecture Notes in Networks and Systems, vol 498. Springer, Singapore. (https://doi.org/10.1007/978-981-19-5090-2_10)
- **Srivastava, U. P.**, Vaidehi, V., Koirala, T. K., Ghosal, P. (2023, February). Performance Analysis of an ANN-based model for Breast Cancer Classification using Wisconsin Dataset. In 2023 International Conference on Intelligent Systems, Advanced Computing and Communication (ISACC) (pp. 1-5). IEEE. doi: 10.1109/ISACC56298.2023.10083

- Singh, A., Swaminathan, I., **Srivastava, U.P.**, Kumar, A., Borah, N., Ghoshal, P. , (2023) A Light Weight Classification Architecture of Plant Leaf Diseases Based on Improved Sequential Convolutional Neural Network. IEEE. (Accepted)
- **Srivastava, U.P.** (2023) A Comparative Study of Deep Learning Algorithms in Classifying Brain Cancer. IEEE. (Accepted).
- **Srivastava, U. P.**, Shedge, K.M., Koirala, T. K., Ghosal, P. A Transfer Learning based GUI for Skin Cancer Diagnosis and Classification using Dermoscopic Images. IEEE. (Submitted)
- **Srivastava, U. P.**, Das, A., De, B., Ghoshal, P., (2023) An Attention Guided Convolutional Neural Network (CNN) Based Segmentation of Optic Cup and Disc for Glaucoma Detection, IEEE (Submmited)

Certifications

30 Days of Google Cloud (Google), Machine Learning Industrial Training (Internshala), Data Analysis with Python (IBM-Coursera), The Joy of Computing using Python (NPTEL), Natural Langauge Processing (Internshala), Predicting Heart disease using Machine Learning - Guided Project (Coursera), Machine Learning Course (Kaggle)