Archisha Chandel

Mumbai — India

🔗 iamarchisha   iamarchisha
✉ chandelarchisha@gmail.com   📱 +91 7021754504

Academia

B.E. in Computer Engineering   **GPA: 8.0/10.0**
University of Mumbai — Bharati Vidyapeeth College of Engineering
- Degree focus on Data Structures & Algorithms, AI/ML Applications and Engineering Mathematics

Data Science Masters Program
GreyAtom
- Coursework in ML concepts, Industrial Application of AI, Deep Learning, NLP and a Final Capstone Project

Work Experience

Data Scientist   **Paamsteps**
Provides web services ranging from custom application to business automation solutions   *2022 - Present*
- **Customer behavior analysis** to develop insightful communication strategies using **explainable AI - SHAP**
- Tested hypothesis & developed a scoring mechanism achieving **19%** increase in converted tenancy rate
- Extracted knowledge using **semantic analysis** & **NLP techniques** from text/voice data for model improvement

Data Scientist   **Fractal Analytics**
Multinational AI company helping global Fortune 100 companies power every human decision   *2021 - 2022*
- Researched and implemented **GANs** for synthetic data generation with average performance gap of 6% to overcome data scarcity & complexity such that inter data and intra feature relationship is maintained
- Determining success of campaigns - Addressed model decay due to **concept drift** by performing EDA, enhancing data processing pipeline, verifying consistency using PSI score & examining ML model stability
- Product promotion optimization - Formulated PPG and used **demand forecasting** to achieve business goals

AI Research Scientist   **Tessact Pvt Ltd**
Assisting the transformation of businesses through innovative video recognition technologies   *2021*
- TV content compliance - Annotated media using object detection algorithm with **ResNet50** as backbone
- Enhanced baseline model accuracy by **12%** using feature analysis and data processing techniques
- Utilized **AWS S3** for data management; **SageMaker** for annotation, training and deployment of the model
- Improvised range of features provided by analytics platform by adding 6 new features to make it user-friendly
- Articulated a thesis and **white paper** on the system of models developed during the course of the project

Machine Learning Engineer   **Tvarit GmbH**
Solutions for all manufacturing problems and data science needs   *2019-2020*
- Developed algorithms to reduce scrap in manufacturing industry and integrated with AI platform
- Built business value dashboards using Grafana to visualize results obtained during development
- Designed algorithms for statistical analysis & pre-processing of the data and prepared technical reports
- Customer segmentation and price optimization - Led a project on prediction of ambient conditions in a retail store to maximize profits - Bagged **first place** in the competition by European Data Incubator(EDI)

Volunteer Experience

Machine Learning Mentor   **Upwork**
Freelancing platform   *2021*
- Mentored 3 individuals for a machine learning course and helped them to implement projects
- Helped them learn simple and **multilayer perceptron** construction and its application on real-world datasets
- Guided them for a projects like Time-series weather forecasting for **predictive maintenance** using **LSTM**

Open-Source Contributor   **Mozilla**
Project PRESC, a toolkit for the evaluation of machine learning classification models   *2020*
- Achieved position in **top 3 contributors** for PRESC project during the contribution period
- Exhaustive research, experimentation and report development on **model suitability** & evaluation techniques
- Solved issues on visualization & learning from misclassification, traversal of space in train-test, cross-validation split, evaluating importance of training data points, understanding **covariate shift** in dataset

Positions of Responsibility

Club President   Toastmasters International
Nonprofit educational organization that teaches public speaking and leadership skills   2022
- Helped the club achieve Distinguished title and **won International Speech Contest** at the Club & Area level
- Completed all 5 levels of Presentation Mastery pathway with **12+ public speeches** as a motivational speaker

AI Mentor for Uplift Project   GirlScript Foundation
A global-remote initiative for people providing a platform for learning   2020
- **Mentored 15 students** working on the machine learning project 'Credit Card Fraud Detection'
- **Delivered lectures** on implementing deep learning and neural networks algorithms for projects

Other Projects

Hackathons
AIDL (Artificial Intelligence & Deep Learning)   **Unifynd**
- Solution to extract necessary information from the given invoice or a bill — *GitHub*
- Utilized **semantic segmentation** techniques to segment each required field in the invoice or a bill
- Used **text recognition** techniques to generate the information from each of the required field

HumAIn   **TCS**
- **Natural language processing** (NLP) project to build the taxonomy given text data — *GitHub*
- Designed data-processing techniques after EDA to give more weightage to important keywords in the data
- Tested algorithms like **MLKNN, SGD, LR** with OneVsRest to finalize the model and get the best result

Personal projects
Multistep Timeseries Prediction — *GitHub*
- **Probabilistic forecasting** of a wind generating system to assist in decision making and predictive maintenance
- Developed a codebase to generate the different time series LSTM models based on user configurations

Flask Projects
- **Python Speech to Text** — Using Google **speech recognition API** for transcription — *GitHub*
- Licence Plate Detection — OCR using **OpenCV** & **tesseract** with deployment on AWS — *GitHub*

Additional Learning

Online Courses
TensorFlow in Practice (4 courses) — *Certificate*   **DeepLearning.AI**
- Focused on applying machine learning skills with **TensorFlow** to build and train powerful models
- Developed multiple projects with minimal code using TensorFlow & maintained all projects on *GitHub*
- Covered topics — Convolutional Neural Networks, Natural Language Processing, Time Series Prediction

Nanodegree Program: Intel® Edge AI for IoT Developers — *Certificate*   **Udacity**
- Leveraged OpenVINO™ Toolkit to fast-track development of high-performance CV and DL applications
- Identified key hardware specs and utilized DevCloud to test model performance on various hardware types
- Course GitHub — *People counter* — *Smart Queue Monitoring System* — *Computer Pointer Counter*

Scalable Machine Learning on Big Data using Apache Spark — *Certificate*   **IBM**
- Focused on developing skills to scale data science and ML tasks on Big Data sets using Apache Spark
- Designed multiple **PySpark** pipelines like data analysis, processing also feature engineering, model building
- Course *GitHub* — Guide to learn and use Spark with Python through PySpark with resources

Conference
- Computer Vision and Pattern Recognition (CVPR), Nashville, 2021
- Deployable AI, Robert Bosch Center for Data Science and Artificial Intelligence, IIT Madras, 2021

Papers
- *AI Game BOT* (2020) - International Journal for Science and Advance Research In Technology, 6(5) by Archisha Chandel, Tejal Kadam, Akanksha Dubey, Prof. Rahul Patil
- *Sales Prediction System using Machine Learning* (2019) - International Journal of Scientific Research and Engineering Development, by Archisha Chandel, Akanksha Dubey, Saurabh Dhawale, Prof. Madhuri Ghuge

Skills

Programming	Python, Spark, Git, Docker, Tensorflow, Keras, Scikit-Learn, AWS Sage Maker, Pandas
Administrative	Management and planning, Communication, Public speaking
Hobbies	Fine arts, Graphic designing, Reading fiction novels, Baking