Archisha Chandel

chandelarchisha@gmail.com | +91 7021754504 | Website

Curiosity driven individual striving to find ingenious solutions to real-world problems

EDUCATIONAL QUALIFICATIONS

Year	Degree/Exam	Institute	GPA/Marks (%)
2020	B.E. in Computer Engineering	Bharati Vidyapeeth College of Engineering, Mumbai, India	8.0
2016	HSC	Khar Education Society, Mumbai, India	76.15
2014	ICSE	P. G. Garodia School, Mumbai, India	96.17

RESEARCH TOPICS

- Computer Vision: Single-Shot Learning, Object Detection, Motion Tracking
- Data Science: Bayesian Statistics, Multivariate Statistical Analysis

PAPERS & CONFERENCES

- Archisha Chandel, Tejal Kadam, Akanksha Dubey, Prof. Rahul Patil "AI GAME BOT" (2020) Internation Journal for Science and Advance Research In Technology, 6(5)
- Archisha Chandel, Akanksha Dubey, Saurabh Dhawale, Prof. Madhuri Ghuge "Sales Prediction System using Machine Learning" Vol 2-Issue 2 (667-670) Mar-Apr 2019, International Journal of Scientific Research and Engineering Development
- Conference on Deployable AI organized by Robert Bosch Centre for Data Science and Artificial Intelligence (2021), IIT Madras
- Conference on Computer Vision and Pattern Recognition, 2021

EXPERIENCE

• Tessact Pvt Ltd, India

AI and data analytics company, assisting the transformation of businesses through powerful and innovative video recognition technologies

Research Scientist May 2021 - Present

- Exploring and discovering approaches to solving TV content compliance cases of nudity, violence, drugs and gore.
- Writing research paper on the system of models developed to solve issues with TV content compliance
- o Defining architectures for object detection both generic and specific items along with research paper writing
- o Project: TV content compliance and video metadata detection
- Achieving: A product mastering the art of content compliance and metadata detection for the media industry
 Data Scientist (Intern)
 Feb 2021 Apr 2021
- Building products that redefine media production, digital advertising, consumer experience, and content analytics
- Perform tasks of research, data management, testing, training, and building deep learning models
- o CI CD integration with the backend for structured and continuous product development
- Maintenance of code base and database on AWS platform
- o Project: TV content compliance project management and planning
- Achievement: Successful end-to-end completion of TV content compliance project

• AIMonk Labs Pvt Ltd, India - Machine Learning Engineer (Intern)

Jan 2021 - Jan 2021

Worked on CV-Tricks, a one-stop blog platform providing practical tips, tricks, and methods used for making world-class computer vision solutions

- In-depth research on concepts of image classification, data imbalance in deep learning, implementation and limitations of ResNet and EfficientNet
- o Proof of concepts performed on real-world datasets
- Achievement: Contributed to a deeper understanding of computer vision concepts and their application to the firm

• GirlScript Foundation, India - AI Mentor for The Uplift Project

Jun 2020 - Aug 2020

A global-remote initiative for people worldwide providing a platform for like-minded individuals to meet, share and learn about topics that interest them

- o Guided 15 students working on the project 'Detecting Insincere Questions on Quora'
- $\circ \quad \text{Discussed and conducted lectures on implementing deep learning algorithms and neural networks}$
- Achievement: Successful completion of the project through acts of strong leadership, supervision, and teamwork

• Mozilla - Open Source Contributor for PRESC

Mar 2020 - May 2020

PRESC - Performance Robustness Evaluation for Statistical Classifiers is a toolkit for the evaluation of machine learning classification models

- Exhaustive research, experimentation and report development on model suitability and evaluation techniques
- Constant problem-solving approach emendation under the guidance of mentors
- Achievement: Top 3 contributor during the contribution period

• Tvarit GmbH, Germany - Machine Learning Engineer (Intern)

Dec 2019 - Feb 2020

Provides fast and customized solutions for all manufacturing problems and data science needs. Selected through the hiring challenge organized as a part of a Winter Internship application procedure

- o Expanded the AI Platform through development and integration of algorithms with their unit and integration tests
- o Built business value dashboards using Grafana, presented technical reports and prototyped solutions
- Writing advanced Python algorithms, pre-processing data, testing hypotheses using statistical means, and developing mathematical algorithms
- o Project: prediction of ambient conditions required in a retail store depending on customer frequency to maximize profits
- Achievement: Algorithms and dashboards developed are being run on the AI platform and successful on-time completion and delivery of all the aspects of the project

PROJECTS

• TV Content Compliance - Tessact Pvt Ltd, India

Feb 2020 - Apr 2020

Managing and project planning for deploying video analytics service using AWS, and Django for building the web-application for displaying analytics results on a dashboard, curated as per client needs

• Number Plate Detection - Flask application

Dec 2020

Using image processing techniques with OpenCV and tesseract to detect license plates with application deployment on AWS

• Speech to Text - Flask application

Sept 2020

Using PyAudio and SpeechRecognition API to transcribe audio files with application deployment on Heroku

• Computer Pointer Controller - Edge Application

May 2020 - Jun 2020

Several models working together, each one covering a needed functionality to control the pointer depending on the facial features extracted, e.g. gaze estimation, head pose estimation, face detection

• AIDL Hackathon - Unifynd, India

Mar 2020

Worked in a team to extract information from bill/invoice (image) using deep learning algorithms, Python-tesseract for image segmentation and conversion to text with natural language processing techniques

• **People Counter App** - Edge Application

Feb 2020 - Mar 2020

The app detects people in a designated area, providing the number of people in the frame, average duration of people in frame and total count built using Intel® Distribution of OpenVINOTM Toolkit

• Prediction of Ideal Ambient Setting for Retail Store - Tvarit GmbH, Germany

Jan 2020 - Feb 2020

- o Ambient settings temperature, humidity, air pressure and luminescence were evaluated for 3 different retail stores
- o Ideal range was predicted in order to optimize the basket size at any given time of the day for each store
- **HumAIn** Tata Consultancy Services, India

Jul 2019 - Oct 2019

Quarter-finalist in the national-level AI competition solving a taxonomy creation problem by StackOverflow on tag prediction

MISCELLANEOUS

- **Technical skills** (languages and concepts): Image and Video Processing, Python, SciPy, Speech Recognition, OpenVINO, Git, TensorFlow, PySpark
- Creative skills (softwares): Adobe Photoshop, Adobe Illustrator, Adobe Premiere Pro, Blender, ZBrush
- **Personal skills** (lauded by professionals in the field): Administrative, management and planning, communication and work ethic
- Online Courses: TensorFlow Developer Professional Certificate by deeplearning.ai and Scalable Machine Learning on Big Data using Apache Spark by IBM
- Interests: Fine art, Graphic Designing, Reading Fiction Novels, Baking