# Archisha Chandel

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

Educational Qualification\_\_\_\_\_

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	96.15

### Research Topics\_

Data Science Bayesian Statistics, Multivariate Statistical Analysis, Time-series Analysis (IoT and

finance data), Advanced Visualisation and Pattern Recognition

Machine Learning Regression, Bayesian, Tree-based algorithms, XGBOOST, dimensionality

reduction, Generalised Linear Models and Forecasting Problems

**Computer Vision** Single-Shot Learning, Object and Motion Tracking, Recommendation Systems

# Conferences & Papers\_

1. Conference on Computer Vision and Pattern Recognition (CVPR), 2021

- 2. Conference on Deployable AI organized by Robert Bosch Centre for Data Science and Artificial Intelligence (2021), IIT Madras
- 3. Archisha Chandel, Tejal Kadam, Akanksha Dubey, Prof. Rahul Patil "Al GAME BOT" (2020) International Journal for Science and Advance Research In Technology, 6(5)
- 4. 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

# Experience\_\_\_\_

### Tessact Pvt Ltd, India - Research Scientist

Feb'21-Present

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

- Discovering approaches to solve TV content compliance problem, and maintaining database and backend on AWS and internal platform
- Articulating thesis and articles on the system of models developed
- Building Smart Video Analytics, a product that redefines media production, digital advertising, consumer experience and content analytics

Achieving: A product with 60% better performance than the baseline modules and a 40% increase in the diversity and range of features provided by the analytics platform

### Al Monk Labs Pvt Ltd, India - Machine Learning Engineer

Jan'21-Feb'21

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

- Research on concepts of image classification, data imbalance in deep learning, implementation and limitations of ResNet and EfficientNet
- Articulating proof of concepts performed on real-world datasets

Achievement: Contributed to a deeper understanding of computer vision concepts and their application

### Mozilla - Open-Source Contributor Experience

Feb'20-May'20

Project 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
- Independent problem-solving approach emended under the guidance of industry experts

Achievement: One of the top 3 contributors during the contribution period

### Tvarit GmbH, Germany - Machine Learning Engineer

Dec'19-Feb'20

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

- Expanded the Al Platform through development and integration of algorithms with their unit and integration tests
- Built business value dashboards using Grafana, presented technical reports, prototyped solutions
- Writing advanced Python algorithms, pre-processing data, testing hypotheses using statistical means, and developing mathematical algorithms

Project: Prediction of ambient conditions required in a retail store depending on customer frequency to maximize profits, customer segmentation and Price Optimization

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

# Volunteer Experience\_\_

### Machine Learning Mentor, Upwork

Jun'21-Present

Mentoring individuals on a one-on-one basis helping them understand Machine Learning concepts and guiding them on projects through the freelancing platform, Upwork. Use-cases solved include:

- Image classification through pattern recognition for images generated by solar flares
- Ping pong Atari game development using Reinforcement learning
- Simple and multilayer perceptron construction and its application on real-world datasets
- Time-series weather forecasting for predictive maintenance using LSTM

Achievement: I have helped 3 individuals with successful and happy learning experience

### Al Mentor for Uplift Project, GirlScript Foundation

Jun'20-Aug'20

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

- Guided 15 students working on the project 'Credit Card Fraud Detection'
- Discussed and conducted lectures on implementing deep learning algorithms, neural networks Achievement: Successful project completion through acts of strong leadership, supervision, teamwork

# Projects & Hackathons\_

#### License Plate Detection

Dec'20

Flask application built using image processing techniques with OpenCV and tesseract to detect license plates with deployment on cloud-platform, AWS

Speech to Text Sept'20

Flask application built using PyAudio and SpeechRecognition API to transcribe audio files with application deployment on Heroku

### AIDL Hackathon, Unifynd

Mar'20

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 over a period of 2 days

### HumAln, Tata Consultancy Services

Jul'19-Oct'19

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

### Miscellaneous

Technical Skills (languages, frameworks, concepts) Python, Pandas, Numpy, SciPy, Matplotlib, Sci-kit learn, Git, TensorFlow, AWS Sage Maker, EDA, data collection & processing, predictive maintenance and recommendation system

Creative Softwares

Adobe Photoshop, Adobe Illustrator, Adobe Premiere Pro, Blender, ZBrush

Personal Skills (lauded by professionals)

Administrative, management and planning, communication, work ethic, perseverance, creativity, affability and enthusiasm

Interests

Fine art, Graphic Designing, Reading Fiction Novels, Baking