## **AYAN NARESH GADPAL**

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## WORK EXPERIENCE

Monsoon CreditTech Senior Data Scientist

May 2021 - Current

Aug 2023 - Current

- Managed multiple interior research projects which automated the deployment and reporting of ML models.
- Expanded the capabilities of company's product by enhancing existing features and adding new, crucial ones. Coordinated with the development team to implement these enhancements.
- Developed, deployed, and managed various ML models, including fraud detection and risk models, for a diverse range of clients.

Senior Data Analyst

Aug 2022 - Aug 2023

- Developed risk and propensity models in client-facing projects for a top bank in India while effectively communicating internally and externally.
- Audited 2 machine learning risk models for a prominent Indian bank to make sure they satisfied governance, stability, and development validation standards as well as business requirements.
- Created various APIs for default prediction and integrated them with the LOS system using Python, distributed SQL, and R. Data Scientist Aug 2021 – Aug 2022
  - Created an automated feature engineering API which improved the results of model significantly.
  - Delivered project for a prestigious Indian bank in just 2 months including extensive validation and rich features with minimal supervision.

Machine Learning Intern

May 2021 - July 2021

Contributed in Monsoon Infrastructure designing to ensure high sustainability and re-usability.

PMV Electric, Mumbai | Deep Learning Intern

May 2020 - June 2020

- Worked on affordable Level 3 autonomy self-driving cars.
- Achieved 71% accuracy (SOTA 81%) with a lightweight semantic segmentation which cost 70% less computation than SOTA on the target hardware.

AP ANALYTICA, Pune | Deep Learning Intern

Oct 2019 - Jan 2020

Developed an Automatic Image-based document parsing system to convert the physical documents to their digital text

## **EDUCATION**

Pune Institute of Computer Technology, Pune

June 2018 - July 2021

Bachelor of Engineering - Information Technology CGPA: 9.92

Government Polytechnic Gondia, Gondia

May 2015 - Jun 2018

Diploma in Computer Engineering Percentage: 84 %

**PUBLICATIONS** 

CascadeTabNet: An approach for end to end table detection and structure recognition from image-based documents [100+ Citations] [1500+ stars] [400+ forks] [Github] [Paper] [arXiv]

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2020

HOG, LBP, and SVM based Traffic Density Estimation at Intersection

[Github] [Paper] [arXiv]

IEEE Pune Section International Conference (PuneCon), 2019

**SELECTED PROJECTS** 

Artificial Human Companion, B.E. final year project, PICT, 2021

[link]

A virtual assistant with an automatic face animation for customer service. Integrated NVIDIA's Flowtron (text2speech), Joint BERT (Intent classification and slot filling), and Speech Recognition (speech2text) together with an SQL database.

Real time Human Authentication using Videos, Smart India Hackathon 2020, DRDO, 2020

[link]

Camera-based authentication system with state-of-the-art Face Detection, Face Landmarking, Face Recognition, Face Anti-Spoofing, Gait recognition, Pose Estimation. Web-Application-based deployment using Django, SQLite, and AJAX.

Automatic 3D Objects Inspection System, Consultancy project, VEM, 2020

Automatic system for camera-based high precision dimension extraction of 3D objects for quality inspection.

Online Inspection of Packed Tobacco Cases, Smart India Hackathon 2019, ITC LTD, 2019

[link]

Machine Learning-based Tobacco Grade image classification based on colour and texture with a PyQT UI application

[link]

Al-based Smart Vehicular Traffic Junction, PASCkathon social hackathon 2019, ACM, Pune

Computer vision and ML based traffic density estimation. Intelligent traffic light control using IP Cameras and the Internet of Things. Remote Server-based (Web app) real-time traffic Monitoring, Controlling, and Visualization.

**Deep Learning**: PyTorch, Tensorflow Keras

**SKILLS** 

Languages: Python, SQL, Java, C++, C **ML**: Pandas, NumPy, featuretools, sklearn

**Databases**: Vertica, MySQL, Firebase Other: Docker, Git, Jira

Framework: Django, FastAPI

## **AWARDS & HONORS**

- Finalist Smart India Hackathon 2019, and 2018 (India's Biggest Hackathon)
- Runner Up Social Hackathon, at ACM PASCkathon PICT 2019 (Shortlisted to present at Google DevFest 2019 Pune)