

# ASTHA SINGH THAKUR

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## SUMMARY

Experienced ML Engineer with a proven track record in developing and deploying machine learning models for various applications. Proficient in data-driven solutions for end-to-end problem-solving

## PROFESSIONAL EXPERIENCE

### AI Specialist & Project Manager, Needpedia Org

May 2023 - Sep 2023

- Led AI assistant development, improving bot detection efficiency by 10% leveraging advanced ML methods
- Spearheaded project management, achieving a 30% productivity boost through improved collaboration

### Developer Analyst, HotelKey

Feb 2023 - May 2023

- Automated Postman API collections for clients, increasing testing precision by 90% of Property Management System
- Generated front-end web app UI/UX mock-ups, resulting in a 20% rise in user satisfaction based on usability testing
- Improved back-end database management, reducing data processing errors by 30% and boosting accuracy by 20%

### Data Scientist & Assistant Manager, Angel One Ltd. (formerly Angel Broking Ltd.)

Sep 2021 - Dec 2021

- Led team in implementing trading strategies, leading to ~14% MoM client acquisition rate surge, earning EoM
- Developed predictive financial algorithms leading to a 15% boost in ROI using GCP's BigQuery, ML with R & Python
- Analyzed campaigns, resulting in 20% enhancement of the decision-making efficiency, using Google Data Studio
- Revamped the NPS rating system, securing a 25% rise in customer satisfaction, and implemented targeted incentives for a 30% upswing in customer participation in survey journeys and contests

### Senior Analyst, Cartesian Consulting

Jun 2019 - Jul 2021

- Received 'More than Expected' award 2020-21 for upscaling Fortune 500 businesses through user-centric CRM analytics and targeted campaigns, resulting in 20+ million of monthly incremental sales
- Achieved 10 on 10 NPS rating for contributing to a 6-7% increase in monthly revenue through advanced analytical ML models, A/B testing, cross-sell, & market basket analysis to architect end-to-end processes for optimal scalability
- Recognized with the 'Extra Mile' award OND 2020 for enhancing digital presence & personalizing recommendations using advanced data analysis & data-driven methodologies for Promo Optimization of Fortune 100 QSR brand
- Automated campaign execution processes & optimized retail client account databases with SQL servers, reducing query response times, minimizing data discrepancies resulting in enhancement of operational efficiency by 25%

## PATENTS & PUBLICATIONS

### An Intelligent Framework for Driver Fatigue Detection - IEEE ICIRCA

Aug 2023

- Real-time drivers drowsiness detection system based on a hybrid model of Gradient Boost Decision Tree-CNN-LR

### IOT Device for Breast Cancer Detection – UK Design Patent - Design number - 6289909

Jul 2023

- An IoT device integrating sensors, enabling continuous data collection and remote monitoring, improving early detection and minimizing the need for frequent in-person appointments

## PROJECTS

### Hate Speech Detection using Machine Learning

Jun 2023 - Aug 2023

- Developed and compared ML models that can automatically identify and flag hate speech content on social media

### Exploring ML Techniques potentially preferable for Breast Cancer diagnosis

Aug 2022 - Dec 2022

- Exploring ML techniques for breast cancer diagnosis, aiming to improve early detection of cancer

## EDUCATION

University of Texas at Dallas | Master of Science, Computer Science | GPA: **3.7/4**

Dec 2023

University of Mumbai | Bachelor of Technology, Electronics and Telecommunication | GPA: **8.2/10**

May 2019

## SKILLS

**ML:** Python, R, Tensorflow, PyTorch, MATLAB

**Big Data:** Spark, Kafka, Hadoop

**Database:** MySQL, MS SQL, Google BigQuery

**Analytics:** CRM, A/B Testing, Root Cause Analysis

**Visualization:** Figma, Google Data Studio, Excel

**Management Tools:** Git, Jira, Confluence

**Methodologies:** SDLC, Agile, Waterfall, Scrum

**Frontend:** HTML, CSS, JavaScript, React, Bootstrap

**Backend:** Python, Java, C, C++, PHP, Node.js, JDBC

**Automation & Testing:** Postman, VBA, Macros

**ML Concepts:** Reg, Classif, Clust, NLP, RL, Time Series, Model Eval, Hyperparam Tuning, Cross-val, Dim Reduc

**SE Concepts:** Data Structures & Algorithm, OOP, MVC, CRUD, Design Patterns, API Automation, DBMS, UML