ROHAN THORAT

London | rohanthorat28@gmail.com | GitHub | LinkedIn | Portfolio

SUMMARY

A highly skilled Artificial Intelligence graduate with extensive experience in AI, ML, Statistics, Software development, and system engineering, adept at thriving in fast-paced environments and delivering exceptional results on data-focused projects.

SKILLS/TOOLS

- Programming Languages: Python, SQL, MATLAB.
- Programming Frameworks: PyTorch, OpenCV, NumPy, Pandas, Matplotlib, Scikit-learn, Seaborn.
- Technologies: Computer Vision, Deep Learning, Linux, GitHub, Tableau.
- Languages: English (Full Professional Proficiency), Marathi (Native), Hindi (Native).

EDUCATION

MSc in Artificial Intelligence | Queen Mary University London | Distinction (*Oct, 2023*)

- Relevant Coursework: Computer Vision, Machine Learning, Artificial Intelligence, Applied Statistics, Cognitive Robotics, Advanced Robotics System, Deep Learning and Computer Vision, Ethics, Regulation and Law in Advanced Digital Information Processing and Decision Making.

Bachelor of Electronics Engineering | Mumbai University | *CGPA 7.8/10* (*June 2018*)

- Relevant Coursework: Object Oriented Programming, Structure Programming Approach, Communication Skills, Digital Image Processing, Signal and Systems, Business Communication and Ethics, Digital Signal Processing and Processors.

PROJECTS

❖ **Transfer Learning for Car Parking Detection using a Single Shot Multibox Detector.**

- Engineered a robust car parking detection system using the **SSD** object detection algorithm, employing **k means clustering** to achieve a **20%** improvement in accuracy**.**
- Streamlined the state-of-the-art SSD algorithm to reduce computational costs while maintaining a competitive mAP of 70%.
- Prioritized environmental sustainability by minimizing parameter usage and energy consumption during training, effectively enhancing the base SSD model's predictive capabilities.

❖ **Unsupervised Learning by Generative Adversarial Network (GAN).**

- Addressed the need for robust unsupervised learning by comparing Autoencoder and Generative Adversarial Network (GAN) architectures.
- Formulated an autoencoder and GAN to explore diverse model structures, optimized objectives, and training procedures.
- GAN architecture outperformed the autoencoder by **15%** in image quality; demonstrated evolving capabilities with generated images at different epochs.

❖ **PII Classification for Blogging Platform.**

- Developed a privacy-preserving text classification model to detect and remove personally identifiable information (PII), achieving an overall accuracy of **93.98%** and an F1 score of **79.21%**.
- Enhanced data preprocessing and augmentation strategies, improving the recall for "Credit Card Number" by over **10%** and boosting F1 scores by **20%** for minority classes.
- Optimized the transformer-based architecture, reducing training time by **30%** while achieving up to 24 samples per second processing speed with efficient GPU utilization.

EXPERIENCE

❖ **System Engineer | Tata Consultancy Services Ltd** *Aug 2018 – Aug 2022*

- Spearheaded the successful implementation of Microsoft Windows Azure Infrastructure as a Service, creating a robust cloud infrastructure for clients. Streamlined operations, enhancing scalability and cost-efficiency.
- Effectively managed and mentored a group of professionals as a team lead, fostering a collaborative and productive work environment. Developed strong soft skills and communication abilities, delivering exceptional service to clients.