MRINAL WALIA

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EDUCATION

University of Windsor, Windsor, Ontario
Master of Applied Computing, Artificial Intelligence Stream
Dayananda Sagar College of Engineering, Bengaluru, Karnataka
Bachelor of Engineering, Computer Science and Engineering

Jan 2022-Present **GPA – 3.8/4.3** Aug 2017-Jul 2021

GPA - 8.98/10

TECHNICAL SKILLS

Programming languages: Python, Java, R, Markdown, reStructuredText

Data Science & Machine Learning: TensorFlow, PyTorch, Big Data, OpenCV, NLP, Deep Learning, Neural Networks, LSTM, Data Visualization, Data Mining, Data Cleaning, Data Annotation, Machine Learning Modelling, Data Privacy Frameworks/Tools: Apache Spark, Hadoop, AWS, Git, Jira, Docker, Anaconda, Jupyter NB, MS Tools, Canva, Figma Databases: MySQL, NoSQL, MongoDB, AWS-DynamoDB, AWS-S3

WORK EXPERIENCE

OpenMined @ Google Season of Docs 22 – Technical Writer

May 2022-Present

PySyft Tutorials (rST, Markdown, Canva, Figma, Git, Slack, Notion, Python, Jupyter notebook) **GitHub** (https://github.com/OpenMined/PySyft/pulls/abhiwalia15)

• Designed and delivered readme page, tutorials, and other docs for PySyft library by auditing existing documentation and proposing new outlines and infographics. (Pull Request: #6633, #6669, #6759)

TESSACT – Data Scientist Intern

Nov 2021-Feb 2022

Object Detection in Media (Python, OpenCV, AWS [Ground Truth, S3], PySpark, Jira, Git, TensorFlow)

• Improved model accuracy by 5.5% and significantly reduced development time by automating data (500K+) collection, labelling, training, and implementation of neural networks for object detection (50+ classes) in videos.

Versa Networks – Quality Assurance Intern

Feb 2021-Jul 2021

Routing Feature Automation (Python, Java, Selenium, Git, Jira, PyTest, Shell Scripting, Ubuntu)

• Implemented new features for SD-WAN before the product launch and integrated/automated test scripts by identifying and analyzing bugs and errors found.

KoiReader – Computer Vision Intern

Nov 2020-Jan 2021

Autonomous Logistics Inspection (Python, R, AWS [DynamoDB, SageMaker], Git, Slack, OpenCV, PyTorch, NLP)

• Executed back-end pipeline for automatic inspection of cargo containers by collecting raw images, applying OpenCV and NumPy to up-scale images (up to 4x) and extracting useful information from the images in real-time

Morph – AI/ ML Designer Intern

Jun 2019-Aug 2019

Image Classification (Python, TensorFlow, MySQL, OpenCV, Jupyter Notebook, RestAPIs)

Programmed an image classification pipeline for detecting face nebulizer masks with over 98% accuracy.

RESEARCH EXPERIENCE

Recovering Human 3D Model from Monocular 2D Images for Detecting Postures Deformities

Jan 2021

- Presented at the MATJOURNALS, 2021; awarded 'Best Paper Presentation' in the Image Processing category.
- Elaborated on deep learning algorithms like BlazePose, DeepPose, OpenPose, etc. used for pose estimation.

PROJECTS

Stocks Analysis & Prediction (Python, R, Streamlit, LSTM, APIs, NoSQL, TensorFlow, Git)

GitHub: 25 Stars & 22 Forks (https://github.com/abhiwalia15/AI-for-Finance-Stocks-real-time-analysis-)

• Designed and implemented an interactive dashboard for predicting stocks prices (98% accuracy) for next 30 days.

Facial Emotion Recognition (*Python, TensorFlow, Keras, API, NLP, MongoDB, OpenCV, Git*). Aug 2019-Oct 2019 GitHub: 6 Stars & 3 Forks (https://github.com/abhiwalia15/Facial-Expression-Recognition)

• Achieved 94% accuracy by implementing a neural network to recognize the emotions (7 types) in real-time.

LEADERSHIP AND INVOLVEMENT

- **Freelance Technical Writer** Experienced technical writer (5+ years) holding 250+ published articles with a background working for multiple magazines, publications, start-ups, open-source organizations, and more.
- Google Season of Docs'22— Aced Google competition to work as Technical Writer with an open-source organization.
- Smart India Hackathon—Received a silver medal (out of 38 teams) for presenting the project as tech lead from AI & ML Innovation Lab@DSCE at the National level