Reshmika Dhandapani

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EDUCATION

Easwari Engineering College/Anna University, Chennai, India

July 2021

Secured a Bachelor of Engineering in Electronics and Communication Engineering with *Distinction* Ranked 4th in a class of 55.

(CGPA 8.75/10)

PROFESSIONAL EXPERIENCE

Accenture, Chennai, India | *Associate Software Engineer*

August 2021 - Present

- Attending trainings on Quality Engineering. Exploring Manual and Automation Testing techniques.
- Developing an understanding of Agile Framework and DevOps for effective project management.

Illuminate AI, San Francisco, USA, (Remote) | Cohort Manager

June 2021 - Present

- Trained on advanced Computer Vision and Natural Language Processing concepts.
- Organizing meetings and one-on-one sessions for each mentorship cohort. Monitoring team performance and ensuring progress of the mentors and mentees while maintaining records of candidates.
- Served as the Single Point of Contact for all queries related to the mentorship program.

Omdena, New York, USA, (Remote) | Junior Machine Learning Engineer

January 2021 - June 2021

Improving the Lives of Cancer Patients by Identifying Existing Non-Cancer Generic Drugs

- Co-built a Natural Language Processing web application with an impactful startup Reboot Rx to identify existing non-cancer generic drugs.
- Employed tools such as Labelbox for annotating the dataset and used Trello for efficient project management.
- Led the development of an automated data extraction process through annotating thousands of clinical studies and patient counts.
- Coordinated the validation and pre-processing of datasets to develop various classification models thereby building a foundation for further analysis.

Detecting Weeds & Crops Using Drone Imagery To Reduce Environmentally Devastating Herbicides Usage

- Collaborated with SkyMaps Agrimatics to build a machine learning model to identify weeds and crops using drone
 images and, thereby, facilitating reduction in the use of herbicide.
- Executed data augmentation and synthetic image generation as well as studied the workflow of Computer Vision Annotation Tool (CVAT) and performed annotations using the CVAT tool.

The Sparks Foundation, Singapore, (Remote) | Tech Intern / Mentor

December 2020 – March 2021

- Built solutions to minor Data Science and Computer Vision tasks such as Prediction Using Decision Tree Algorithm,
 Exploratory Data Analysis on a Retail dataset and a Global Terrorism dataset, Face Mask Detection and Social Distancing Tracker using Python.
- Translated complex data sets into comprehensive visual representations as a part of the learning process.
- Assisted in the growth and development of the interns by guiding them with their assignments and resolving their technical and non-technical queries related to Data Analytics and Programming.

Career Launcher, Tamil Nadu, India | Machine Learning Intern

May 2020 - June 2020

- Performed Data Cleaning and Wrangling on several financial stocks using python libraries such as Matplotlib and Seaborn to understand the data.
- Worked on different data exploration and visualization techniques such as Box and Whisker Plot, Correlation Matrices and Kernel Density Estimation.
- Identified the correlation between different stocks and their diversification and created trade calls using Simple Moving Average and Bollinger Bands with 95% accuracy.
- Created a regression model for recognizing discrepancies in prediction and formulated a Modern Portfolio Theory.

ACADEMIC PROJECTS AND PAPERS

Detection of COVID-19 using Transfer Learning from Chest X-Ray Images

- Developed a model to detect COVID-19 using chest x-ray images. These images are segmented and then used to train a classification model using the Inception v3 model, which distinguishes covid 19 from pneumococcal records and safe records, producing high computational efficiency with an accuracy of 97 per-cent.
- Technologies Used: Python, Deep Learning, Exploratory Data Analysis, Transfer Learning.
- Authored and published a paper on the same in 2021 3rd International Conference on Signal Processing and Communication (ICPSC) in IEEE in April-May 2021, ISBN:978-1-6654-2865-1.

Handwritten Text to Braille Conversion

- Developed a project is to convert handwritten Text to Braille Language for the Visually impaired. The model will
 capture an image of the handwritten text from paper and will convert it to editable text format and then map it to
 its respective braille alphabets.
- Technologies used: Python, Machine Learning, TensorFlow
- Authored and paper accepted for publication in the 3rd International Conference (Virtual Mode) on "Mobile Radio Communications & 5G Networks (MRCN- 2021) in Springer Indexed - "Lecture Notes in Networks and Systems" in June 2021, Paper ID: UIETKUK/ECE/MRCN2021/229.

Sign Language to Text and Voice Conversion Using Machine Learning

- Developed a translator that can detect hand gestures in an image and translated its meaning to text and speech using Convolutional Neural Networks (CNN), obtained an accuracy of 89%.
- Technologies used: Machine Learning, Deep Learning, Python, Advanced Excel
- Won 4th position in the "Project Day" conducted at Easwari Engineering College and received a funding of Rs.10,000.

Driver Activity Recognition Using Deep Learning

- Developed a model that focuses on 11 driver distraction activities via images of the driver.
- Explored and used various regression and classification algorithms such as Linear Regression, Decision Trees, Naïve Bayes' and CNN.
- Technologies Used: Python, Data Analytics and Visualization, Machine Learning Techniques.
- Obtained an accuracy of 94.33% Using Convolutional Neural Network.

TECHNICAL SKILLS

- Programming Languages: Python, C, C++, Java, Web Development.
- Libraries: Keras, OpenCV, TensorFlow, Scikit-learn, NumPy, Pandas, Matplotlib.
- Platforms and Miscellaneous: Anaconda, Jupyter Notebook, Spyder IDE.
- Tools: MySQL, Tableau, Flask, Heroku, Trello, Asana, Jira, Slack, Microsoft Office.

COURSES AND CERTIFICATIONS

- Excel to MySQL: Analytic Techniques for Business Specialization by Duke University Coursera since June 2021.
- Deep Learning Specialization offered by deeplearning.ai Coursera in June 2020.
- PCAP: Programming Essentials in Python offered by Cisco in April 2020.
- Machine Learning: Python in Data Science offered by Udemy in February 2020.
- Internet of Things Workshop offered by IIT Madras in January 2019.
- IOT Implant Training offered by BSNL in December 2018.
- Programming in C and C++ offered by SRM Axis Pvt Ltd. in December 2018.

EXTRA CURRICULAR ACTIVITIES

- Arranged offstage and onstage events, headed the backstage team and organized cultural meets as the member of the on-site organization committee for Retweet Inter-College Cultural Team in 2020. Also, was assigned as department representative for Vulcans Intra- College Cultural Team during 2019-2021.
- Served as the Master of Ceremonies and Content Writer reports for 3+ technical events as the Student Member of SECE (Society of Electronics and Communication Engineering) from 2018 to 2021. Also, was invited as a lead speaker at a career guidance session conducted by IETE (Institution of Electronics and Telecommunication Engineers).
- Selected as a Campus Ambassador for Techobytes Technologies, promoted and helped in growing the brand community by online and offline channels. Assisted with outreach programs and services on the campus on behalf of the organization and enrolled over 90+ students for a workshop.

SOCIAL SERVICE

- Designated as the Community Chairperson, Rotaract Club of SRM Easwari Engineering College, 2019-2020.
 Organized a flagship event called ARAM to raise funds for surgeries of cleft lip affected underprivileged children.
 Successfully helped with over 25 surgeries.
- Appointed as Joint Secretary, Rotaract Club of SRM Easwari Engineering College, 2018-2019. Led over 30 projects in the tenure. Maintained effective records for administration and responsible for upholding communication and correspondence within and outside the club.
- Extended assistance to women in terms of mental growth and supported each other through regular activities as the Member of Lean-In Chennai Circle in 2021.