ASHISH VAIGANDLA

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EDUCATION

UCLA ANDERSON SCHOOL OF MANAGEMENT   Los Angeles, CA
Master of Science in Business Analytics (MSBA)   *December 2023*
F-1 STEM OPT | UCLA Merit Fellowship Recipient
Machine Learning, Statistical Modelling, Customer & Entertainment Analytics, Optimization, Python, SQL, R, Data Management

INDIAN INSTITUTE OF TECHNOLOGY MADRAS *(IITM)*   Chennai, India
Master of Technology / Bachelor of Technology in Naval Architecture and Ocean Engineering - GPA: 3.9/4.0   *June 2022*
Minor in Systems Engineering- GPA: 3.98/4 | Sri Poovai TR Srinivasan & S Alamelu Awardee- best academic record
Statistics and Probability, Vector Calculus, Process Optimization, Mathematical Foundations of Data Science,
Applied Time-series Analysis, Principles of Economics, Data Structures and Algorithms using Python

INSTITUTO SUPERIOR TECNICO   Lisbon, Portugal
Exchange Student, Master of Technology in Naval Architecture and Ocean Engineering   *Sep 2019 - Jan 2020*
Travel Grant Recipient and one of **5** out of **880** to be selected for a **semester exchange** program to pursue the 5th semester

TECHNICAL SKILLS

Analytical Skills: Machine Learning, Deep Learning - Computer Vision, Data and Project Management
Tools: Python (TensorFlow, NumPy, Pandas, Matplotlib, Sklearn), R, SQL, HTML, Django, Tableau, Excel, PowerPoint
Certifications: Coursera Machine Learning Specialization, Coursera Computer Vision Specialization

PROFESSIONAL EXPERIENCE

CONNECTED DIGITAL SYSTEMS INDIA *(EdTech)*   Chennai, India
Data Science Internship   *June 2021 - Jan 2022*
- Developed a proctoring exam system using face detection **CNN** models for noticing suspicious activities
- Integrated the **AI** proctoring system with a web application using **Django** for conducting and managing online exams

COCHIN SHIPYARD LIMITED *(Shipping)*   Kochi, India
Industrial Trainee   *June 2019*
- Analyzed Ship Repair department's operations and optimized cash flow by **12%**; gained insights on New Dry Dock Project
- Received hands-on experience in Ship Building aboard INS Vikrant, **India's 1st** indigenously built aircraft carrier

DATA ANALYTICS PROJECTS

SHIP DETECTION IN SATELLITE IMAGES USING DEEP LEARNING, IIT Madras
- Performed **data cleaning** and **data augmentation** techniques on Ship **SAR** datasets to improve model's learning
- Trained and compared various ship detectors like **Faster R-CNN, YOLO**; selected best one for ship detection/tracking
- Improved detection time and average precision of ship detectors by **30%;** best model takes **20 milliseconds** to detect ship

CUSTOMER SEGMENTATION, IIT Madras
- Optimized **k-means** algorithm using elbow method and applied **PCA** to visualize **data** & perform **dimensionality** reduction
- Segmented the customers into Transactors, Revolvers, VIPs & New Customers to develop the bank's **marketing strategies**

CREDIT CARD FRAUD DETECTION, IIT Madras
- Modelled a classifier that indicates the **authenticity** of a requested transaction as being a fraud one or a valid one
- Applied **SMOTE** technique and solved the **class imbalance** issue, which resulted in a **20%** increase in **F1** score

MACHINE LEARNING PIPELINE, AZURE ML Studio
- Created an **end-to-end ML pipeline** and predicted whether an individual's annual income is greater or less than **$50K**
- Deployed the trained model as an Azure web service and improved the prediction accuracy from **80%** to **94.4%**

INVESTMENT ANALYSIS, Instituto Superior Técnico
- Performed **Financial analysis** of Atlantic vessel and devised new operational processes that reduced costs by **15%**
- Customized **Freight rate** by determining **Net Present Value** and **IRR** of investment**,** which boosted **revenue** by **18%**

COST OPTIMIZATION, Instituto Superior Técnico
- Optimized terminal space and developed a **preliminary plan** for a **Container Terminal** in the port of Viana do Castelo
- Reduced the port's equipment costs and infrastructure costs by **20%** by optimizing the empirical formulas

AWARDS AND INTERESTS

- Awarded **Samsung-IITM Pravartak** undergraduate fellowship 2021-22 to pursue research in **Ship detection**
- Achieved **All India Rank 2** in Junior level Final test held by **Association of Mathematics Teachers of India**
- Active **YouTube** content creator, engaging **11.7K+ subscribers** and **2.6+ Million views**
- Initiated flagship event **Mediano** with **$50K** budget and media events like **Short Film making,** engaging **1500+** participants
- Secured **3rd** place in **Solo-Photography** competition and was one of **17** representatives of IITM at **Inter IIT Cultural Meet**