

Moraldeep Sachdeo

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[Linkedin](#) | [Github](#) | [Website](#)



SUMMARY

Graduate Student with 1+ year of professional experience in Operations, Data Science and the use of SQL & Python languages, looking out for exciting opportunities starting Jan 2021

EDUCATION

UNIVERSITY OF CALIFORNIA BERKELEY

Aug 2019 - Dec 2020

Master of Engineering in Industrial Engineering and Operations Research | Specialization: Data Analytics and Supply Chain

Technical Coursework:

Applications of Data Analytics, Applied Data Science with Venture Applications, Optimization Analytics, Risk Modeling Simulation and Data Analysis, Industry Analysis, Supply Chain Management

Management Coursework [Haas School of Business]:

Managing the New Product Development, Big Data and Better Decisions, Sustainable Supply chains, Marketing and Product Management

VELLORE INSTITUTE OF TECHNOLOGY, Vellore, India (4/4)

2014 - 2018

Bachelor of Technology in Mechanical Engineering | Ranked top 5% in Cohort

PROFESSIONAL EXPERIENCE

Beam Solutions, San Francisco

Sept 2019 - May 2020

Data Science Intern

- Built Python-driven unsupervised machine learning models, to cluster client text data into clusters that isolate and identify fraudulent financial activity
- Transformed corpus of project descriptions into model-ready summaries using **NLTK** and **RegEx** to lemmatize, stem, and translate text
- Researched and assessed the performance of pre trained word embeddings including: **Word2Vec**, **GloVe**, and **Facebook fastText**, for **clustering** client text dataset into distinct categories
- Re-evaluated and refined sentence embeddings based on performance in **K-Means Clustering** and **Sequence-to-Sequence neural network models** on the topic-modelling task with result of 89.47% AUC Score

Mercedes Benz India Pvt Ltd, Pune, India

Dec 2017 - Dec 2018

Operations Trainee

- Handled **logistics and supply chain** of Paint Shop for 4 variants of Mercedes Benz Cars (S, E, C, GLC)
- Applied Principles of **Lean Six Sigma** to identify Stations for process Improvement using **SQL** and **Excel** which lead to cost saving of minimum \$15k annually
- Managed a team of 30 Members to perform mechanical operations on CKD Model of cars
- Presented 20 **KPI Statistics**- Key Performance Index charts using **Tableau** for MB India

SOFTWARE SKILLS

- Programming Languages and Visualisation Softwares: SQL, Python, R Programming, Tableau
- Statistical Software: SAS Studio, Minitab, Free Mind
- Modeling and Algorithms: Machine Learning, Mathematical Modelling, Statistics, Risk Modelling, NLP

PROJECTS

FuSSI-Net: Fusion of Spatio-temporal Skeletons for Intention Prediction Network (Project for VOLVO Cars USA & Sweden)

2020 Asilomar Conference on Signals, Systems and Computers (Co-author of Research Article | [Project Website](#) | [Research Paper Link](#))

- Goal: Development of Deep Convolutional Neural Network model for monitoring and predicting Pedestrian intention
- Analyzed information from videos acquired using vehicle's front-facing cameras to deliver an end-to-end system taking an input video and providing a video output with all the analysis without any intermediate break-downs that can interface with functionalities for smart collision avoidance in autonomous driving
- Achieved the highest AP score of **0.89** for the early-fusion based classifier by experimenting different training routines

Improving Manufacturing Lead times via Analytics and Simulation (Value Stream Mapping, SQL, ARENA)

International Journal of Lean Six Sigma (Published Research Article | **ISSN: 2040-4166** | [Research Paper Link](#))

- Analyzed the current state of methodology adopted in a bonnet manufacturing industry using SQL and ARENA and optimized the process by designing a future state map using simulation approach improving VSM efficiency by **18.18%**

Development of a B2B Marketplace and contracting platform for HVAC Industry

Start-up Idea via the Product Management MBA Class Pitched to VCs at Berkeley | [Website](#)

- Developed a deep understanding of the business objectives and a need for a connecting marketplace between OEMs and buyers by speaking with various internal and external stakeholders of the HVAC industry; evangelized the product vision and maintained an accurate and achievable roadmap

LEADERSHIP

- UC Berkeley Master of Engineering Ambassador and Admissions Interviewer for the batch of 2021 [Selected amongst **500** Grad students]
- Graduate Student Instructor - Math 1B (Calculus) & Innovation Navigation and Management (Haas School of Business)
- Technical Head, Human Powered Vehicle Asia Pacific Challenge [Team **Rank 8** overall with Design **Rank 1**]