HARSH HEGDE

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EDUCATION

University of Michigan December 2022
Master of Science, Industrial and Operations Engineering, Focus - Data Science GPA: 3.72/4
Fellow, Tauber Institute for Global Operations
Courses: Linear Programming, Regression Analysis, Advanced Data Analytics, Optimization Methods, Big Data Management & Statistics, Simulation Design & Analysis, Behavioral Economics

National Institute of Technology Goa June 2020
Bachelor of Technology, Electronics and Communication Engineering

EXPERIENCE

Operations Research Engineer Intern May 2022 - August 2022
General Motors *Python, SQL, Tableau, Excel*

- Led the design and implementation of a data-based decision-making tool to aid feasibility prediction, and perform cost-benefit analysis for computer vision technology, resulted in pilot at 2 general assemblies
- Evaluated and structured use of computer vision application for safeguarding problems in manufacturing cells reducing annual downtime by 30% and resulting in savings of $180K

Software Engineer August 2020 - August 2021
Amadeus IT Group *Java, JavaScript, Python*

- Conceptualized and implemented new machine learning algorithms for Malaysia Airlines Enrich Miles loyalty programs as single point of contact, resulted in savings of $100K
- Devised high-volume predictive models for development of airline ticket booking engines across range of e-commerce products increasing team client renewal rates 13%
- Accelerated team project delivery by 2 weeks for projects related to framework transformation using newly learnt Agile Scrum methods; awarded "Best Employee of the Quarter"

Product Management Intern May 2019 - September 2019
Reach Technologies: HolaGraph *Excel, PowerPoint*

- Built comprehensive product roadmap and business strategy for HolaGraph: Deep Learning recruitment platform for rural India throughout product lifecycle leading up to launch, led to 10% user growth
- Analyzed global freelance market to identify attractive market segments for product feasibility analysis; created linear business growth strategy and reduced marketing costs by 35%

Research and Development Intern June 2018 - July 2018
Siemens Healthineers India *Python*

- Designed vertical movement endurance testing system using Python for Cios-Fit mobile C-arm X-ray system during testing phase leading up to launch of model, improved testing accuracy by 40%

PROJECTS

- **Simulation and Analysis of Bus Transportation Systems in the City of Ann Arbor**: Simulated the bus system in the city of Ann Arbor for electric, hybrid, and conventional buses using Markov Chain Monte Carlo Simulations. Analyzed viability of each bus type by comparing several metrics associated with the operational feasibility and time variance.
- **Boston Blue Bike Data Analysis**: Evaluating how seasonality affects blue bike Usage in the city of Boston for weather and COVID-19 vaccination rates using multiple linear regression.
- **Analysis of Personal Key Indicators of Heart Disease**: Analysing CDC's heart data to gain an insight into the key predictors of heart diseases using supervised learning methods - Support Vector Machine, K-nearest neighbor, and Logistic Regression.

SKILLS

Languages/Packages: Python, SQL, R, Java, C, C++, HTML, CSS, TensorFlow, SciPy, Gurobi
Software/Frameworks: Tableau, MATLAB, Git, Hadoop, SAS, Power BI, VBA, Jupyter Notebook
Machine Learning Toolkit: Regression, Decision Trees, k-NN, Random Forests, Naive Bayes, NLP