S I D D H A R T H   G O E L

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EDUCATION

University of Pennsylvania | **MSE in Data Science** (**December 2021**) | GPA: 3.79/4.00
- **Coursework:** *Machine Learning, Big Data Analytics, Deep Learning for Data Science, Computational Linguistics (NLP), Statistics for data science, Learning in Robotics, Time-series Forecasting Methods*

University of Delhi | **BE in Information Technology** (**May 2012**) | GPA: 7.75/10
- **Coursework:** *Programming Languages, Object Oriented Design, Algorithms and Data Structures, Database Systems*

KEY SKILLS

- Python – PyTorch, NumPy, pandas, scikit-learn, matplotlib, seaborn
- SQL, NoSQL, MongoDB, Apache Spark

RESEARCH EXPERIENCE

- **Research Area:** Computer Vision/Perception in Robotics, Visual navigation
- Pursuing a [master's thesis](#) on navigation of agents in [3D indoor environments](#) to perform tasks such as point goal and object goal navigation under the guidance of [Kostas Daniilidis](#) and [Georgios Georgakis](#).

INTERNSHIP

Amazon, Seattle, US | Applied Scientist Intern   **May 2021** – **Aug 2021**
Forward Looking Sampling | *Python, pandas, SQL*

- Conducted a comprehensive analysis of the complex and massive Amazon supply chain and end-to-end operations.
- Designed and evaluated a novel sampling strategy to generate high-fidelity samples of the millions of customer orders placed on Amazon.com and its subsidiaries.
- The samples are intended to improve simulations based on which Amazon plans its entire order fulfillment supply chain across the world.

BharatPe, New Delhi, India | Data Science/Machine Learning Intern   **Jul 2020** – **Dec 2020**
#Series_C_Indian_Fintech_Startup, #Digital_Payments, #5.5M_merchants, #45M_monthly_transactions

- **Predicting Merchant Business Category** | *Python, pandas, scikit-learn, SQL*
  Developed a predictive model to identify the merchant's business category - food & beverages, fuel, consumer goods etc., contributing to **2% revenue increase** by running targeted marketing campaigns and promotional offers.

- **Identifying Money Leakage** | *Python, pandas, SQL*
  Built and conducted experiments to verify all the incoming and outgoing payments reconciliation for all product lines, proactively **preventing potential bottom line impact** by checking money leakage and future cost in audit disputes.

- **Daily Settlement Ratio** | *Data Mining, Python, pandas, SQL*
  Improved the daily payment settlement ratio by identifying users having dysfunctional accounts for reasons such as blocked/frozen accounts, limit exceeded etc. using pattern recognition in recent historical transactions, **increasing user retention by 5%**.

ACADEMIC PROJECTS

- **US Traffic Accidents** | *Predictive Analytics, Python, scikit-learn, matplotlib, seaborn, Spark* | [[Github Repo](#)]   **Apr 2020**
  Built the complete data science pipeline by performing extensive exploratory data analysis, data pre-processing, feature engineering, and data modelling on about 3 million records of the [US Traffic Accidents dataset](#).

PROFESSIONAL EXPERIENCE

                                                                              June 2012 – **August 2019**
Deloitte Consulting (**US-India**) | Technology Consultant

- **Preventing payment disputes:** Built a classification model using random forest algorithm to predict payment disputes on open invoices, decreasing the effort in consolidation of payments at quarter end by 30% and **reducing bottom-line impact by 25%.**

- **Inventory replenishment**: Developed novel solution to forecast demand from customers' buying trends using croston algorithm and SAP Predictive Analytics Library (PAL), **reducing material stock-outs by 95%** and adding 15% to top-line.
  - The ML solution is estimated to generate revenues worth $10M+ for Deloitte.