# Harsh Mangal

#### **EDUCATION**

# University of Illinois Urbana-Champaign

Champaign, IL

Master of Science in Information Management [GPA: 3.71/4.0]

Dec 2018

(Programming Analytics, Data Mining, Data Stats and Info, Applied Business Research, Business Analytics, Business Intelligence)

# Swami Keshwanand Institute of Technology, Management and Gramothan Bachelor of Technology in Computer Science Engineering [GPA: 3.5/4.0]

Jaipur, India Jun 2016

(Data structures, Database Management, Computer Architecture, Data warehousing, Object oriented programming, Design of algorithms)

## **PROFESSIONAL EXPERIENCE**

#### Senior Data Analyst Intern at EnterpriseWorks, University of Illinois Research Park

May 2018 - Present

- Managing and optimizing internal data flows for Research park using Salesforce. Managing front-end as well as back-end of the salesforce
  by creating visualforce pages for various events organized by Research park and storing data securely into the salesforce database.
- Provide **statistical programming** expertise to produce various correlation analysis, linear regressions, and time series analysis using **python** to analyze the venture capital funding data, for startups and Entrepreneurs in residence.
- Wrote python scripts to perform text mining to transform the event attendee data into human readable format to perform data analysis.
- Providing Business Intelligence expertise and business analytical solutions to all the stakeholders along with university research park directors.

#### Project Manager at Business Intelligence Group, UIUC

Aug 2018 – Present

- Managing a diversified team of 5 consultants to create roadmap for information governance and data quality from web and MDM platform.
- Responsible for project scoping, conduct research studies, managing and estimating timeline of the project. Working closely with different employees of client (Fortune 500 company) to understand and identify the need of data stewardship.

## Graduate Assistant (Machine Learning) at Bond Research Group, UIUC

Mar 2018 – May 2018

- Developed **Python** scripts to analyze the uncharacterized carbon emissions in carbon sources. Used the data and applied **Machine Learning** to build classifiers and subsequently to analyze the patterns of carbon emissions.
- Cleaned and preprocessed the data and made related graphs to gain insights about emission gases like SO<sub>2</sub>, CO<sub>2</sub>, CO. Performed **bootstrap** analysis to achieve a 90% confidence interval between the observed and predicted value.

## Data Analyst at WebCraft IT, Indore (India)

Jun 2016 – Jun 2017

- Analyzed the user activity data and the transactions on the client websites using **Python and MySQL**. The user activity data analysis helped in increasing the performance of business and sales by 5%.
- Worked on **ETL strategies** for processing data to derive valuable information and communicated data-driven insights and recommendations to clients by visualizing data in **Tableau**.
- Designed and presented risk models and strategies that improved marketing programs, resulting in 15% increase in revenue, by running regression analysis and reports to forecast and track program performance.

#### **PROJECTS**

- Prudential Life Insurance Assessment, Kaggle.com challenge Developed a Machine Learning model using Scikit Learn and Gradient boost classifiers which predicts the level of risk in providing insurance to the client. Improved the efficiency of the model to 0.58 and ranked among top 10 participants.
- Principal Component Analysis Algorithm, Hackerrank.com challenge Implemented PCA data mining algorithm in python to distinguish cancer versus normal patterns in mass-spectrometric data.
- Frequent pattern mining Implemented Apriori algorithm in python to mine frequent patterns and closed patterns in a transaction dataset.
- Tropical Storm Tracking Analysis Analyzed different parameters for a storm like speed, distance traveled, landfalls, compass bearings in python using PyGeodesy library for the storm data of over 4000 storms provided by National Hurricane Center, USA
- Online Dashboard to Track KPI'S Built an online dashboard in Tableau to track the KPI's of a real-world data set which shows various insights of the dataset.

#### **SKILLS**

• Analytics and Visualization: Python (Pandas, NumPy, Matplotlib, ScikitLearn), R, Tableau 10, Power BI, Google Analytics

• Databases: MySQL, Oracle, SQL

• **Programming Languages:** C++, Java (Oracle Certified)

• Development Tools: Anaconda, PyCharm, RStudio, Jupyter Notebook, MySQL Workbench, Eclipse, Visio

#### LEADERSHIP RESPONSIBILITIES

- Member, Association of Data Science and Analytics Student led group which focuses on data science and big data learnings and projects.
- Blue Member, Global leaders: Orange and Blue Engagement (GLOBE) Helping new domestic and international students to develop leadership skills and foster global awareness and cultural competency.