

# SIDDHARTHA VALE

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## EDUCATION

**Northeastern University**, Boston, MA Dec. 2018 – Dec. 2019  
Master of Science in Information Systems

**Relevant Courses:** *Big Data Intelligence, Advanced Data Science, Data Management & Database design, Business Analysis & Information Systems, Application Engineering and Development, Business Ethics & IP*

**Royal Melbourne Institute of Technology**, Melbourne Australia Dec. 2012 - Dec. 2016  
Bachelor of Engineering in Mechanical Engineering,

**Relevant Courses:** *Applied Thermodynamics, Fluid Mechanics, Computer Aided Design, Solid Mechanics, Engineering Enterprises, Advanced Mathematics (Statistics & Calculus), Mechatronics*

## SUMMARY OF QUALIFICATIONS

**Programming:** Python, Spark, Java, Azure, AWS

**Database:** MySQL, Microsoft Access

**Business Intelligence:** Tableau, Power BI, Qlik Sense, Advanced Excel (Pivot Tables, VLOOKUP and IF functions)

**Tools:** Jupyter Notebooks, NetBeans IDE, PyCharm CE, Databricks, Lucid Chart, Toad Modeler, ER Studio

## ACADEMIC PROJECTS

**UFC Prediction Model** | *Database Management & BI* ([www.github.com/SiddharthaVale/Portfolio](https://www.github.com/SiddharthaVale/Portfolio)) Aug. 2018 – Dec. 2018

**Technologies Used:** *Python, Jupyter Notebooks, Databricks, Tableau*

- Attained an accuracy score of 69.88%, 5% higher than any other model available and 7% higher than the bookies accuracy
- Developed a prediction system with increased accuracies using supervised learning and neural network models such as logistic regression, random forest and multi-layer perceptron
- Performed precise exploratory data analysis on test and train datasets with evidence given proving gaps in prior work which is addressed with our model

**Assembly Line System** | *Database Design* Jan. 2018 – Apr. 2018

**Technologies Used:** *MySQL, Lucid Chart*

- Created an Assembly Line System to manage all operations in a manufacturing company including parts stamping, initial assembly, final assembly and inspection
- Reduced the need for manual control by implementing hard coded views, functions, triggers and different stored procedures
- Applied concepts of relational databases & executed analysis. Design ER model applying Lucid charts and MySQL

**Bitcoin Transaction Management** | *Application Development* Jan. 2018 – Apr. 2018

**Technologies Used:** *Java, JFrame*

- Implemented Cryptocurrency concept of transaction for bitcoins from different enterprises through a system administrator
- Instrumented blockchain technology to record transaction details and measure security of the transactions
- Catered to enterprises with search results for best deals. Led a three-person team through various aspects of the project

**Travel Application** | *Business Analytics* Jan. 2019 – Mar. 2019

**Technologies Used:** *Balsamiq*

- Design an application to rival Expedia & TripAdvisor, with innovative systems not utilized by competition
- Apply business analytics techniques to maximize user interactions & target large audience demographics

## WORK EXPERIENCE

**Emerson Process Management**, Pune, India Nov. 2015 – Feb. 2016  
Engineering Intern (New Product Dev. Team)

- Access design impact of innovative technology combined with use case data provided by clients' product applications
- Developed a testing & verification framework to measure success of products
- Documented new technologies & their success with information about designs & its success for production standards

**Formula-SAE E88 Racing**, Melbourne, Australia Nov. 2014 – Dec. 2016  
Aerodynamics & Cooling Engineer

- Designed numerous models to interpret the efficiency of air cooling the critical components of the vehicle
- Constructed visually appealing data plots to validate the information sourced from testing
- Conducted intradepartmental communications to optimize workflow and minimize margins for errors
- Performed computational fluid dynamic testing on the aero to prove its benefits to the Global SAE governing body.