Ethan Vaz Falcao

ethan.falcao@gmail.com | 508.808.3510 | ethanfalcao.github.io | linkedin.com/in/ethan-falcao

EDUCATION

Worcester Polytechnic Institute   *Worcester, MA*
Bachelor of Science in Data Science & Mathematical Sciences
Minor in Computer Science   *Expected: May 2024*

- Relevant Coursework: Machine Learning, Algorithms, Object Oriented, Modeling and Data Analytics, Data Analytics and Statistical Learning, Principles of Real analysis, Linear Algebra, Combinatorics, Probability Theory, Mathematical Statistics

Awards: Pi Mu Epsilon (U.S. mathematics honors society)

PROFESSIONAL EXPERIENCE

Clora   *Boston, MA*
Business Analytics Intern   *June 2021- September 2022*

- Analyzed payroll administration of healthcare consultants and ensured accuracy and completeness of their contracts.
- Utilized SQL & Tableau to gather, segment & visualize relevant insights, resulting in a 20% reduction in overall report development time.

United Solutions   *Leominster, MA*
Business Analytics Intern   *June 2022 - September 2022*

- A Developed Power BI dashboards with dynamic DAX formulas that reduced report generation time and improved data visualization, enabling more informed decision-making based on key trends.
- Implemented daily IQMS Reports using Python, reducing report generation time and providing critical insights into labor productivity trends.

PROJECTS

Finding the Most Optimal NBA team for the 2022-23 Season

https://ethanfalcao.github.io/nba_team.html

- Created a Linear Optimization Model, using Python-Pandas and Google's or-tools Linear-Solver,
  to output the most optimal NBA Team for the upcoming '22 -'23 NBA Season.

Yelp Dataset Challenge: Detecting Fake reviews and Business Attributes

https://ethanfalcao.github.io/Yelp_dataset_Challenge.html

- Predicted business attributes and identified fake reviews using machine
  learning techniques applied to the Yelp dataset.

Finding the Most Optimal NBA team for the 2022-23 Season

https://ethanfalcao.github.io/nba_team.html

- Compiled and analyzed data regarding football stats of all international play from 1872 and
  evaluated and selected the most effective machine learning algorithm to predict the winner of the world cup.

LEADERSHIP EXPERIENCE

Data Science Club Treasure   *Worcester, MA*
WPI   *January 2023 - Present*

- Informed the exec board of all the financial activities.
- Implemented a new record-keeping system that improved transparency and accuracy of financial transactions.

IT Volunteer   *Worcester, MA*
Catholic Charities   *June 2022 - September 2022*

- Managed and executed the database migration to Salesforce.
- Maintained and repaired hardware and software

SKILLS

- **Languages:** Python (Pandas, Matplotlib, Seaborn, Sklearn, Tensorflow, Or-tools), R , SQL, Java, Dax, MATLAB
- **Analysis Techniques:** Logistic Regressions, Decision Trees, Neural Networks, Random Forests, Hypothesis Testing, A/B Testing
- **Tools:** Power BI, Kaggle, Jupyter, PyCharm, RStudio, Azure, Salesforce, Tableau, Excel