Mark Asuncion

647-835-5992 | gm.asuncion@mail.utoronto.ca | linkedin.com/in/markasuncion | github.com/gmasuncion | markasuncion.xyz

Education

University of Toronto — Mississauga, ON

Honours Bachelor of Science in Applied Statistics, Minors in Mathematics & Computer Science — *Sep. 2019 – May 2024*

- Cumulative GPA - 3.89/4.00
- Achieved Dean's Honours List throughout all semesters enrolled
- Relevant Coursework: Regression Analysis, Experimental Design, Machine Learning, Spatial Data Science, Databases
- Extracurriculars & Societies: Intramural Basketball, UTMSAM, UTM CSSC, Data Science Toronto

Experience

Business Analyst Intern — May 2022 – Aug 2023

Data Ingest & Product Development Unit | Environment and Climate Change Canada — *Toronto, ON*

- Collaborated with multidisciplinary teams to gather, interpret and write business documents, helping liaison communication between the organization and stakeholders
- Conducted quantitative and qualitative analyses on metadata expressed in **XML** format using **R and Excel**, progressing clients through the data chain
- Automated various routine tasks at the workplace using **Python** and acted as webmaster for the unit's website, streamlining workflow processes and improving overall efficiency
- Quality assured outputs for over **30+** networks across Canada, ensuring data specifications were met which contributed to the development of data products used globally

Operations Lead — Aug. 2021 – Present

Hedoum (Online Vintage Clothing Store) | Shopify Storefront — *Toronto, ON*

- Established key performance indicators (KPIs) and tracked operational metrics to measure performance, making data-driven decisions for process enhancements.
- Planned and executed A/B tests to optimize website performance, resulting in a **11%** increase in conversion rates.
- Spearheaded logistics behind operation of the business, including event planning and running in-person markets as a vendor.

Teaching Assistant — Aug. 2021 – Present

University of Toronto — *Mississauga, ON*

- Facilitated weekly tutorials for **30+** students for several math and statistics courses
- Created curated learning materials for each tutorial and offered assistance outside of class to ensure student success
- Supervised both lectures and discussion boards to provide students with answers to their questions in real-time
- Marked over **1000** assessments from term tests to assignments, providing detailed feedback to each student

Projects & Research

Research Paper | *R, TidyVerse, LaTeX* — Oct. 2022

https://www.mdpi.com/1099-4300/24/11/1579

- Awarded the position as a student researcher by **NSERC** to test the validity of a proposed model against right-censored data by employing goodness of fit tests and simulating various survival algorithms
- Affirmed the paper's findings by building models in **R** from real-world examples of right-censored data, implementing the relevant algorithms and tests
- Published the research paper in a reputable peer-reviewed journal as a co-author alongside 2 other professors, gathering over **600+** views from users

Arts-Based Stats Web App | *R, R Shiny, Git* — Jan. 2023 – Apr. 2023

https://gmasuncion.shinyapps.io/ArtBasedStatisticsSurveyWebpage/

- Designed and developed an interactive data visualization and analysis tool using **R Shiny** for the research done regarding the use of arts in statistics
- Created interactive charts, graphs, and maps that allowed users to dynamically manipulate variables, enhancing data comprehension
- Selected to be on a panel to present the app and insights to an audience of statisticians at the **Joint Statistical Meetings (JSM)** hosted by ASA

Image Identifier | *Python, scikit-learn, Matplotlib, Git* — Oct. 2022 – Dec. 2022

- Implemented an **ensemble model** in **Python** capable of predicting survery responses with **83%** using **NLP** techniques, the model was trained using **scikit-learn**
- Completed necessary data processes (exploration, pre-processing, cleaning, splitting) using **Pandas & NumPy** to demonstrate good machine learning practices before building the model and documented metrics of performance using **matplotlib**

Technical Skills

Languages: Python, R, SQL (MySQL), HTML/CSS, LaTeX, Java
Software: Git, VS Code, Jupyter Notebooks, Rstudio, PyCharm, Eclipse, Excel
Libraries: Pandas, NumPy, matplotlib, scikit-learn, Selenium, beautifulsoup4, TidyVerse, ggplot2, PyTorch R Markdown, R Shiny