Mark Asuncion

+1(647)-835-5992 | gm.asuncion@mail.utoronto.ca | linkedin.com/in/markasuncion | github.com/gmasuncion | markasuncion.xyz

Technical Skills

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

Education

University of Toronto — Toronto, ON
Master's of Science in Biostatistics — *Sep. 2024 – May 2025*
- Concentration in **Artifical Intelligence and Data Science**

University of Toronto — Mississauga, ON
Honours Bachelor of Science in Applied Statistics, Minor in Mathematics — *Sep. 2019 – May 2024*
- **Cumulative GPA - 3.91/4.00** (high distinction)
- Achieved Dean's Honours List throughout all semesters enrolled
- Relevant Coursework: Regression Analysis, Experimental Design, Machine Learning, Neural Networks, Databases
- Extracurriculars & Societies: Intramural Basketball, UTMSAM, UTM CSSC, Data Science Toronto

Professional Experience

Business Analyst Intern — May 2022 – Aug 2023
Environment and Climate Change Canada | Data Ingest & Product Development Unit — *Toronto, ON*
- Collaborated with multidisciplinary teams to gather, interpret and write business documents to facilitate communication between stakeholders
- Managed and analyzed large-scale weather datasets in XML format for clients using **R** and **Excel**
- Leveraged **Power BI** to produce insightful dashboards for analytical reports, providing effective data visualization
- Automated routine tasks using Python, enhancing workflow processes and boosting overall efficiency by **12%**
- Quality assured outputs for **30+** networks across Canada, ensuring data specifications were met for products used globally

Teaching Assistant — Aug. 2021 – Present
University of Toronto | Courses Taught: MAT132, MAT135, MAT136, STA258, STA304 — *Toronto, ON*
- Facilitated weekly tutorials for **30+** students and hosted weekly office hours for several math and applied statistics courses
- Created curated learning materials for each tutorial and gave additional 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

Computer Science Research Assistant — Jan. 2023 – May 2023
University of Toronto — *Toronto, ON*
- Collaborated with professors by analyzing TA feedback to aid in the evaluation of the **Writing Development Initiative**
- Employed **thematic analysis** to derive meaningful insights about the writing habits of students in computer science
- Performed data cleaning and wrangling using **Python** scripts and effectively consolidated key observations into a comprehensive report using **Jupyter Notebooks**

Projects & Research

NSERC Undergraduate Student Research Award | *R, TidyVerse, LaTeX* — May 2021 – Oct. 2022
https://www.mdpi.com/1099-4300/24/11/1579
- Awarded prestigious **NSERC (Natural Sciences and Engineering Research Council of Canada)** scholarship in recognition of academic excellence and research potential
- Conducted cutting-edge research under the mentorship of faculty, focusing on **model checking** with right-censored data
- Affirmed the paper's findings by building models in **R** from real-world datasets and applying the relevant tests
- Published the research paper in a reputable peer-reviewed journal as a co-author, gathering over **800+** views from users

Text Translator | *Python, PyTorch, Pandas, Numpy Matplotlib, Git* — Sept. 2023 – Dec. 2023
- Built and trained a **transformer model** in **PyTorch** capable of translating Shakespearean text into modern English with **83%** accuracy using **NLP** techniques
- Completed necessary data processes (exploration, pre-processing, cleaning, splitting) using **Pandas & NumPy** and documented metrics of performance using **matplotlib**

Arts-Based Stats Web App | *R, R Shiny, Git* — Jan. 2023 – Apr. 2023
https://gmasuncion.shinyapps.io/ArtBasedStatisticsSurveyWebpage/
- Conducted an analysis on student perceptions regarding the efficacy of arts-based methodologies in teaching statistics
- Developed an interactive data visualization and analysis tool using **R Shiny** to output the findings of the research
- Created interactive visualizations that allowed users to dynamically manipulate variables, enhancing data comprehension
- Presented the app and insights to an audience of statisticians at the **Joint Statistical Meetings (JSM)** hosted by ASA