Mark Asuncion

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Technical Skills

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

Education

University of Toronto Toronto, ON
Master's of Science in Biostatistics, ***Artificial Intelligence and Data Science Focus***
- Relevant Coursework: Machine Learning for Health Data, Categorical Data Analysis, Survival Analysis, Bayesian Methods

University of Toronto Mississauga, ON
Honours Bachelor of Science in Applied Statistics, Minor in Mathematics
- Cumulative GPA - 3.91/4.00 **(high distinction)**, recognized on Dean's List **4** times
- Ran weekly tutorials and marked **1000+** assessments for several math and stats courses as a **Teaching Assistant**
- Relevant Coursework: Regression Analysis, Experimental Design, Time Series Analysis, Neural Networks, Databases

Professional Experience

Business Analyst Intern May 2024 – Aug 2024
Shoppers Drug Mart Specialty Health Network | Business Intelligence and Insights Team *Mississauga, ON*
- Wrote queries in **SQL** to pull from a **SalesForce CRM** housing **millions** of records tied to **Patient Support Programs**
- Leveraged **Power BI** to revamp **dashboards** built in **Excel** for **10+** programs, improving management of **data models**
- **Automated** weekly reports of **PAH** patients and their coverage breakdowns in **Python**, reducing turnaround time by **63%**
- Developed internal tool using **Power BI** that dynamically tracked employee bandwidth using **time intelligence**, emphasizing team **KPIs** and reducing planning errors by **22%**

Business Analyst Intern May 2022 – Aug 2023
Environment and Climate Change Canada | Data Ingest & Product Development Unit *Toronto, ON*
- Collaborated with multidisciplinary teams to interpret and write business documents, facilitating stakeholder communication
- Managed and performed **ad-hoc analysis** on large-scale weather datasets pulled in **XML** format for **15+** clients using **Python** and **Excel**
- Quality assured outputs for **30+** networks across Canada, ensuring data specifications were met for products used globally

Undergraduate Research Assistant Jan. 2023 – May 2023
University of Toronto | Department of Computer Science *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, consolidating key observations into a comprehensive report using **Jupyter Notebooks**
- Performed data cleaning and processing using **Python** scripts to parse and automatically categorize comments, reducing manual assignment by **71%**

Projects & Research

NSERC Undergraduate Student Research Award | *R, TidyVerse, LaTeX* May 2021 – Oct. 2022
https://www.mdpi.com/1099-4300/24/11/1579
- Awarded **1 of 2** prestigious **NSERC (Natural Sciences and Engineering Research Council of Canada)** scholarships 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 **simulating** algorithms in **R** and building models from **100+** records of cancer data
- Published the research paper in a reputable peer-reviewed journal as a co-author, gathering over **1100** views from users

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 to an audience of **40+** statisticians at the **Joint Statistical Meetings (JSM)** hosted by ASA

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**