Darlene Cheong

darlenecheongsw@gmail.com | +1 (857) 261-6282 | New York, NY

EXPERIENCE

PreciseDx **May 2023 – Present**
Research Associate New York, NY

- Entered, cleaned, and standardized over 50,000+ clinical data points from hospital pathology reports, electronic health records, and imaging metadata, ensuring data integrity for machine learning applications
- Led a data aggregation initiative by consolidating 10,000+ de-identified patient records from three hospitals, creating a systemized database for clinical research and predictive analytics
- Executed cross-checking of large-scale Excel datasets with hospital archives, resolving 300+ data inconsistencies to improve accuracy in clinical trial datasets
- Created and optimized SQL queries to extract, filter, and clean patient and pathology data, streamlining access to structured datasets for internal research teams and reducing manual data retrieval time by at least 40%
- Designed interactive Tableau dashboards to track incoming hospital orders for PreciseDx's inaugural commercial product, analyzing trends in order volume and turnaround time

Columbia University Irving Medical Center **June 2022 – April 2023**
Research Technician New York, NY

- Trained a team of 4 researchers in data analysis and data visualization methods using MATLAB and GraphPad Prism, identifying effective visualization strategies for presenting varied datasets to principal investigators and senior researchers
- Annotated 8,000+ video frames in DeepLabCut, using data labeling for transfer learning models to track and analyze anatomical movements in mice for behavioral research.
- Performed statistical analyses in RStudio and MATLAB, streamlining data workflows and accelerating a 3-year project to completion in 6 months

New York University Center for Genomics and Systems Biology **January 2021 – May 2022**
Honors Researcher New York, NY

- Devised an independent research project on pathogenic bacteria, leveraging R and GraphPad Prism to analyze proteomics and microbial growth datasets, uncovering key insights for therapeutic applications
- Authored a high-honors thesis and presented findings at multiple university research conferences, securing a competitive 2-year research grant
- Mentored master's and undergraduate students in experimental design, lab protocols, and statistical methods

DETER Project (New York University / National Science Foundation) **April 2020 – May 2021**
Researcher and Data Analyst New York, NY

- Conducted research on COVID-19 health disparities, analyzing the impact on lower-income and marginalized communities using qualitative and quantitative methods in R, Excel, and ArcGIS
- Extracted, cleaned, and analyzed a dataset of 6,199 behavior profiles from 19 healthcare facilities using R and Excel, uncovering key correlations between economic segregation and behavioral choices during pandemics
- Built interactive data visualizations in Tableau and Excel, translating findings into actionable insights on systemic health inequities, informing public health policy and intervention strategies

EDUCATION

New York University **January 2019 – May 2022**
B.A. in Biology with High Honors New York, NY
Awards and Honors: George Schwartz Prize in Biology (*Best in Research*), Dean's List, *Cum Laude*
Relevant Courses: Advanced Research, Biostatistics, Computer Programming, Becoming a Scientist, Honors Research Thesis

THESIS AND PUBLICATIONS

"Rapid surveillance of NYC healthcare center egress behaviors during the 2020 COVID-19 lockdown"
Nature (Scientific Data), 2023

- Kirchner, T., [...] Cheong, D., *et al.* Rapid surveillance of New York City healthcare center egress behaviors during the 2020 COVID-19 lockdown. *Sci Data* **10**, 795 (2023). https://doi.org/10.1038/s41597-023-02692-0

"Temporal Localization of *Bacillus subtilis* Protein Kinase A (PrkA) Uncovers Candidate Phosphorylation Substrates"
Inquiry, 2022 (Selected as the Recipient for High Honors in Biology)

SKILLS

Technical Skills: R, MATLAB, Tableau, Excel, GraphPad Prism, SQL, HTML, CSS, Adobe, Microsoft Office Suite, C++