Michael Algarra

Philadelphia, PA

(856) 630-0182

mja353@drexel.edu

LinkedIn: https://www.linkedin.com/in/michael-algarra-764483160/

Github: https://github.com/MichaelAlgarra

Education

Drexel University   **Philadelphia, PA**

Bachelor of Science in Biomedical Engineering   *Anticipated Graduation: June 2022*

Concentration in Bioinformatics, Certification in Japanese Language   GPA: 3.4

Employment Experience

Children's Hospital of Philadelphia   Philadelphia, Pennsylvania

Bioinformatics Research Intern   September 2020 -September 2021

- Assisted in research in epigenetics associated with CHOP and The University of Pennsylvania
- Conducted analyses of DNA methylation data, including statistical tests proving correlations using R
- Cleaned and packaged data, used unix and bedtools to analyze and mutate genetic data

Merck & Co.   West Point, Pennsylvania

Global Vaccine Tech Ops: Digital & Data Analyst   September 2019 - September 2020

- Analyzed and manipulated data from a data lake using Excel, R, Pipeline Pilot, JMP, Minitab, and Spotfire
- Programmed an automated algorithm to pull live manufacturing data from the floor for accessibility in Pipeline Pilot
- Contributed with data analysis for big biological data with the usage of SQL data queries and OSI PI queries
- Communicated internationally to optimize handling of digital data and manufacturing processes in multiple sites

Globus Medical   Audubon, Pennsylvania

Biomaterials Project Engineer   September 2018 - April 2019

- Assisted Engineers in designing, testing, and developing prototypes to be used in spinal surgery
- Developed a method for bone graft and synthetic bone graft delivery using Creo Parametric and SLA 3D printing
- Processed primary tissue for the development of a regenerative product

Project Experience

Automated Pulling of Manufacturing Data Program   Merck & Co.

Programmer/Data Analyst,   September 2019-September 2020

- Automated the collection of syringe and vial production data for reject calculations using R and Pipeline Pilot
- Queried from OSI Pi and databases using SQL to capture batch data
- Programmed an algorithm to take a snapshot of historical live data for counts of inspected product
- Set up program to auto-populate the outputted data tables daily to include up to date batches
- Communicated internationally to interpret aspects of inspection data

Skills

Programming Languages: R, Python, MATLAB, Unix (Bash/Awk script), SQL, Pipeline Pilot (Pilotscript), C

Software: Microsoft Office (All), Spotfire, Tableau, JMP, Minitab, OSI PI Client Tools, Tableau, Creo Parametric

Operating Systems: Mac OS X, Linux, Unix, Windows, Oracle

Laboratory: Micropipetting, Gel Electrophoresis, Titration, Centrifugation

Language Skills: Conversational in Spanish, Certified in Japanese Language

Relevant Coursework

Computer Science I, II	Computation Lab I,II	Genome Information Engineering
Computational Bioengineering	Physiology I, II	Statistics in Biomedical Engineering
Database Management Systems	Chemistry I, II	Cells and Genetics
Thermodynamics	Molecular Biology	Advanced Programming Techniques

Honors and Awards

STLE Scholarship Award recipient, 2019

Burlington County Times Teen Excellence Award Recipient, 2017

Everly Scholarship, 2017 - 2022

Burlington County Association Scholarship, 2017