

SUMMARY

I am a data focused engineer in San Diego constantly growing his knowledge in Statistics. I enjoy finding ways to collect data from many different sources and make them usable for analysis. My toolbox of data analysis methods is always growing and I enjoy working with others to learn new ways of presenting data. I spend much of my free time teaching children, new grads, and adults how to program while sharpening my own skills in Cluster Computing, Cloud Server Management, and Machine Learning. I currently work as a Process Development Engineer where I help my team make data-driven decisions.

SKILLS

LANGUAGES

Python
R, Julia
Java
Powershell, Bash

DASHBOARD

Flask, Django
HTML/CSS
Tableau Server
Javascript

ANALYTICS

Data Modelling
SQL, MSSQL, MySQL
Pandas/Sci Kit Learn
Tableau, Regex

STATISTICS

Hypothesis (A/B) Testing
PCA, DOE
Frequentist/Bayesian Analyses
Regression, SVM, K-Means

EXPERIENCE

Senior Process Development Engineer | Dexcom | San Diego, CA | Dec 2020 - Present

- Discover ways to acquire and aggregate data from constantly changing sources during development.
- Create dashboards based on Executive Management feedback and Team needs for Performance Reports.

DATA PROJECT:

Dashboard for Automation Line Performance

- Generated a prototype Python Plotly Dashboard for visualizing line status and performance metrics.
- Migrated data visualizations to Tableau and created custom graph components to meet management needs.
- Created Docker deployment of Data Aggregation for use by other engineers quickly.
- Guiding architecture of SQL databases for use in future live data Dashboarding on launch.

Process Development Engineer | Illumina | San Diego, CA | Nov 2018 – Dec 2020

- Coded a C# and SQL based SW for monitoring live production data on custom equipment for MFG Floor.
- Created installable SW with GUI to help non-coding engineers analyze large and complex FMEA documents.

DATA PROJECT:

Multi-Source Data Aggregation

- Rewrote code from R to Python and added integration for accessing JIRA, MSSQL, Network Folders, and Custom SW.
- Aggregated all data into unified structure and created human readable output format with custom visualizations.
- Trained the entire process engineering team to use python to run scripts for personal use.

Design Quality Engineer | Medtronic | San Jose, CA | January 2017 - Nov 2018

- Supported Product Development and R&D in making data-driven quality decisions for Implantable Medical Devices.

DATA PROJECT:

MAUDE Database Analysis

- Utilized PANDAS and DASK to aggregate and filter entire MAUDE FDA Database for analysis.
- Automated the data acquisition and analysis to monitor risk over project lifetime.

Instructor and Chair | ASQ | San Diego, CA | Aug 2019 – Present

- Teach refresher courses and give presentations on Statistics for local Engineers.
- Work with local organization to create mentoring and teaching opportunities for Professional Development.

Research Assistant | University of Memphis | Memphis, TN | Aug 2014 – Aug 2016

- Created an automated program for assessing and creating data visualizations on novel protein assays.

Co-Founder/Manager | UC Merced SATAL | Merced, CA | Sep 2009 – Aug 2012

- Created program for collecting and assessing feedback to improve pedagogical methods.
- Successfully assisted in acquiring WASC Approval for University through data-driven pedagogical changes.

EDUCATION

University of California, Merced | 2012

B.S. Bioengineering

University of Memphis & University of Tennessee Health Science Center | 2016

M.S. Biomedical Engineering