

SUMMARY

I am a data-driven engineer in San Diego constantly growing his knowledge in Statistics and Data Pipelines building my toolbox of data analysis methods and practicing my presentation skills. I spend much of my free time teaching children, new grads, and adults programming and statistics while sharpening my own skills in Cluster Computing, Cloud Server Management, and Machine Learning. I currently work as a data specialist where I manage all servers, databases, and pipelines for critical infrastructure at ASML.

SKILLS

LANGUAGES

Python
R, Julia
Java
Powershell, Bash

DASHBOARD

Flask, Django
HTML/CSS
Tableau Server
Javascript

ANALYTICS

Data Modelling
SQL, MSSQL, MySQL
Pandas/SciKit Learn
Tableau, Regex

STATISTICS

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

EXPERIENCE

Data Specialist | ASML | San Diego, CA | Oct 2021 - Present

- Propose and configure data management solutions for analyzing utilities and infrastructure performance
- Technical Asset Manager for VM Clusters, Site Data Governance Lead, and Data Analytics Lead

DATA PROJECTS:**Critical System Recovery**

- Performed complete analysis of historical data for business-critical systems for RCA of 50% utilities downtime
- Using multiple data analysis techniques identified control system deficits and isolated issue leading to 95% uptime
- Providing data analysis to drive permanent automated solution for 99.85% uptime of all critical systems

Automate Dashboards for Internal Metrics Reporting

- Created ETL pipeline to automate data acquisition from Service Ticket System including Text-to-Metric Analysis
- Automated Dashboards and PowerPoints with Data and present to Upper Management Weekly

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**

- Prototyped Python Plotly Dashboard with Docker for visualizing line status and performance metrics
- Migrated data visualizations to Tableau and created custom graph components to meet management needs.
- 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.
- 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

- 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.

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.

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.
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EDUCATION

University of California, Merced | 2012

B.S. Bioengineering

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

M.S. Biomedical Engineering