**Jayant Solanki** Sunnyvale, CA 94085

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<https://github.com/jayantsolanki>

**KEY SKILLS**

**Libraries**: RMarkdown, plotly, ggplot2, Shiny, D3js, NumPy, OpenCV2, CUDA, scikit-learn, Pandas

**Programming**: Python, R, PHP, MySQL, SAS, HTML, CSS, Git, JavaScript, Laravel

**WORK EXPERIENCE**

**Redbock, Sunnyvale, CA**

**Senior Data Analyst Consultant - BioMarin** **10/24/2022 – Current**

* Product owner and developer of user-friendly R Shiny app for the Biometrics team to quickly create standard Patient Profile PDFs for multiple studies without any coding required. Users copy/create a configuration yaml file to define listings and figures based on SDTM/ADaM datasets
* With fewer customization, app can quickly generate figures for Lab, Safety, Efficacy, and Vital Signs data. It also performs error checking to validate the configuration file
* Program Study reports (tables, listings, and figures) using R scripts

**Skills**: *R, Shiny, tidyverse, CDISC, ggplot2, Rmarkdown, plotly, Rstudio, R Package, Unit testing*

**Nektar Therapeutics, San Francisco, CA**

**Senior Statistical Programmer Analyst** **01/04/2022 – 10/21/2022**

* Lead the team for developing Safety, Efficacy and Enrollment Dashboards for Studies using R and SAS
* Developed SAS coding and table templates for preparing, processing, and analyzing clinical data
* Responsible for processing of clinical data required for analysis of clinical trials for Phases 1-4
* Establish monitoring of data transfers for ongoing trials to identify study conduct or data quality issues

**Skills**: *R, SAS, tidyverse, Tableau, CDISC, Rstudio, Oncology*

**AbbVie, South San Francisco, CA**

**Data Scientist** **05/03/2021 – 01/03/2022**

* Developed KPI dashboards to track site and subject progression in Clinical Trials, devised site engagement tactics, and implemented multiple data pipelines to create robust, live dashboards for stakeholders to support better business decisions
* Used Web Technology and traditional Statistical methods to create data visualizations that are readily comprehensible, animated, storytelling, and highly fluid in visualizing the efficacy and safety of compounds. This reduced reliance on vendors, enhanced AbbVie's creative control, and enabled cross-departmental collaboration between clinical analytics, GMA statistics, and customer experience
* Tapped into AbbVie, Citeline, DQS and TrialTrove data to identify potential Sites for new Clinical Trials

**Statistical Analyst** **01/01/2020 – 05/02/2021**

* Developed a Python script to automate the creation of Table of Contents (TOC) PDF files for CSR and ISS submissions, significantly reducing generation and validation time from days to minutes
* Led Phase-3 development of R Shiny Safety app with D3js and r2d3, awarded R&D President's Award
* Used R to automate the extraction of titles and footnotes from Word templates provided by Biostatisticians, which sped up and improved the accuracy of Analysis Outputs
* Generated Safety and Efficacy outputs in RTF and PDF format using SAS and R for Clinical Trials
* Led SAS Servers migration for Biometrics team, ensured clinical trials milestones were not impacted, generated qualification reports, recreated programming environments, and resolved issues
* Refactored and dockerized apps, produced Safety, Demography, and Efficacy reports using R
* Synergized R and Tableau for rapidly generating annotated Safety Graphics to fulfill Safety requests

**Statistical Programmer I** **03/25/2019 – 12/31/2019**

* Co-developed and validated R-Shiny Dashboard for supporting ad-hoc Safety Detection Signals requests on Clinical trials, resulting in reduced dependence on SAS, Vendors and resources
* Generated Safety and Efficacy outputs in RTF and PDF format using SAS and R for Clinical Trials
* Lead the development of Safety Dashboards for Ongoing Clinical trials using Tableau, devised validation and real-time data pipelines using SAS, and empowered Safety team with tools to inspect Safety Signals
* Built Python toolkit for automated validation of Define.xml hyperlinks in SDTM and ADaM packages, significantly lowered the turnaround time for validation, and enhanced the Study submission process
* Created Python toolkit for comparing Clinical trials with aCRF annotations, Raw and SDTM datasets

**Summer Intern**  **06/11/2018 – 08/17/2018**

* Saved days of work by creating Python tool for automating error corrections in Define.xml pdf of Clinical trials, presented the Paper on the tool at SAS Global Forum, April 2019
* **Skills**: *CDISC*, *Python, R, Shiny, Spotfire, Tableau, SAS, Docker, D3js, Linux, Pandas, tidyverse, Rstudio*

**Indian Institute of Technology - Mumbai, India**

**Senior Project Technical Assistant** **11/05/2015 – 05/18/2017**

* Architected Greenhouse System to automate multi-site distributed irrigation valves for Urban Farming
* Co-developed and deployed Full Stack products for large user base, integrated team profile component, email notifications, SQL querying scripts, and content management
* Built Online Test product in Laravel and MySQL for 40000 students, with automated result generation
* Conceived autonomous navigation-based projects, mentored, evaluated 600 participants for National level Robotics competition, oversaw Summer Internship program, interviewed applicants, and mentored interns

**Skills**: *Laravel, MySQL, MQTT, Python, openCV2, NumPy, Neural Network, Embedded C, node.js, Angular*

**EDUCATION**

Masters in Computer Science & Engineering, University at Buffalo - SUNY, Buffalo, NY  **02/2019**

Bachelors in Computer Science & Engineering, University of Allahabad, India **06/2015**

**PROJECTS**

**Scalable Testbeds using IoT for Sustainable Urban Farming** *(PHP, MySQL, node.js, MQTT, Lua)*

* Engineered Greenhouse Automation capable of auto-discovering and controlling distributed switches
* Created closed loop react system, switch scheduler, sensor data visualizer and health monitor

**Automated Difficulty prediction for Exam Questions** *(Laravel, Python, SQLAlchemy, MySQL, Tornado)*

* Developed and deployed a Full Stack application for robust Question management and audits
* Analyzed responses from Exam takers using K-means clustering to predict difficulty levels of questions

**Parallel & Distributed Programming** *—* **Center for Computational Research** ***(****Apache Spark, openMP, Hadoop, Scala, C++****)***

* Implemented a pointer jumping technique in Apache Spark and MPI using Scala and C++ to find connected components in a distributed graph
* Performed fast computing of Gaussian kernel density estimate for extremely large vector in NVIDIA CUDA

**Cryptocurrency Trading Visualizer** *(Python Tornado, WebSocket, MySQL, SQLAlchemy, Angular 4)*

* Designed an application which subscribed to Cryptocurrency traders and relayed the real-time order-books

**PUBLICATIONS**

How SAS® and Python Enhance PDF: Going Beyond the Basic Output Delivery System PDF, Sy Truong, Jayant Solanki, **SAS Global Forum 2019**