**ANU SRI**

**SAS Programmer**

**PROFESSIONAL SUMMARY**

* Strong 6+ years of broad industry experience in SAS programming, data analysis, data quality assurance, and statistical inference on multiple platforms, using the SAS ETL method to migrate data from different data sources.
* Expert in Clinical Data Analysis: analyzing clinical data, derived datasets, creating tables, and generating listings, reports, and graphs; strong knowledge of Clinical Terminology and regulatory Guidelines.
* Expert in Clinical Trials Data like Demographic Data, Adverse Events, Vitals, and Laboratory Data.
* Experience in cleaning and resolving data issues as well as merging data from different sources into a single integrated dataset; designed, and developed Statistical models including data extraction and manipulation, writing macros, and SQL reporting;
* Expertise in transforming data imported from disparate data sources into analysis data structures, using SAS functions, options, ODS, array processing, macro facility, and storing and managing data in SAS data files.
* Handled large datasets for data extraction, and transformation, and applied business logic rules to incoming data; experience in Data Manipulation procedures such as SAS Formats/Informats, Merge, Proc Append, Proc Datasets, Proc Sort, and Proc Transpose.
* Proficient in Clinical Data Interchange Standards Consortium (CDISC) Study Data Tabulation Model (SDTM) Conversions and Mappings.
* Good knowledge of clinical study designs, common analysis methods, descriptive and inferential statistics, summarization of data and presentation practices, sample size calculations
* Experience in programming for Integrated Summaries of Efficacy (ISE) and Safety (ISS).
* Understanding of regulatory requirements, and NDA processes, from IND submission to FDA approval. This includes Clinical Trials (Phases I-IV), preparation of IND, NDA, safety reviews, adverse event report reviews, and production of integrated safety and efficacy summary (ISS & ISE) for FDA submission.
* Experience with the SAS BI platform with Enterprise Guide, SAS ENTERPRISE MINER, SAS FLOW MANAGER,
* Experience in Python Programming and using pandas package for data extraction, matplotlib package for visualization, and Sklearn packages for machine learning tools like k-means clustering, decision trees, neural network, and SVM machine tools.
* Experience in using Python, Power Bi, and Tableau to do large dataset analysis and business reporting.
* Solid understanding of statistical concepts and econometric techniques. Proficient use of various statistical procedures including PROC CONTENTS, PROC FREQ, PROC MEANS, PROC TABULATE, PROC GPLOT, PROC BOXPLOT, PROC UNIVARIATE, PROC STDIZE, PROC CORR, PROC GLM, PROC ANOVA, PROC FACTOR, PROC PRINCOMP, PROC LOGISTIC, PROC CLUSTER, PROC VARCLUS, PROC TREE and other SAS/STAT or SAS/GRAPH procedures.
* Expertise in advanced SQL programming for joining multiple tables, sorting data, SQL views, and indexes.
* Generate new datasets from raw data files imported or modify existing datasets using SET, SET/SET, MERGE, MODIFY, UPDATE, SQL, APPEND, and HASH.
* Experienced in random sampling using SAS functions and PROC SURVEYSELECT.
* Experienced in producing RTF, HTML, and PDF files using SAS/ODS, well versed in creating HTML Reports for financial data using the SAS ODS facility.
* Experience in programming, debugging, and report generation in SAS; performed validation and QA procedures regularly and documented my analyses and codes daily.
* Quick learner, and highly motivated individual with strong time management and organizational skills.

**EDUCATION**

Master of Health Informatics

Doctor of Pharmacy-PharmD

**TECHNICAL SKILLS**

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| Languages | Python, SQL, HTML5, XML |
| BI/ Analytics | Tableau, Power BI, SAS, Excel, Google Analytics |
| SAS Tools | SAS (BASE, MACROS, STAT, GRAPH, SQL, ACCESS, ODS, REPORTS, ODS), ETL, SAS BI Server, SAS Data Integration Platform |
| SAS Procs | Print, Means, Univariate, Correlation, Regression, SQL, Report, Freq, Sort, Summary, Format, Import, Export, Transpose, Compare, Gplot, and Gchart. |
| Project Management | MS Project, MS Visio |
| Database/Server | MS Access, SQL Server, MySQL |
| Platforms | Health Care, Clinical drug examination, Pharmacovigilance |
| OS | Windows, Linux, macOS |
| Office Tools | MS Word, Excel, Access, PowerPoint. |

**PROFESSIONAL EXPERIENCE**

**Medpace, Cincinnati, OH**

**SAS Programmer, September 2022 - Present**

Medpace is a scientifically-driven, global, full-service clinical contract research organization (CRO) providing Phase I-IV clinical development services to the biotechnology, pharmaceutical, and medical device industries.

**Responsibilities:**

* Created mockup tables and listing for statistical analysis, Ad-hoc report creation, and generating tables, and listings for Phase II-III clinical trial studies; designed and implemented statistical reporting processes for regular data collection and clinical data analysis.
* Built macros for repetitive SAS procedures including flat risk indicator, null table calculator, observation counters, etc.
* Searched for appropriate columns through Oracle databases based on business needs; developed programs using SAS/Base & SAS/Macros to extract data from oracle tables.
* Reading the raw clinical data (weekly and monthly), validating, manipulating, sorting, and merging the data. Generate summary tables, and patient listings and develop different types of statistical reports by using different types of procedures.
* Reviewed data from clinical trials and developed a strategy for how to present results to FDA.
* Trained in Good Clinical Practice (GCP), Regulatory Compliance, FDA Guidelines, Data interpretation, supporting statistical methodologies, and review SAP (Statistical analysis plan).
* Proficient in understanding Study Protocols, SAP (Statistical analysis plan), and CRF.
* Excellent ability in problem-solving, data analysis, and complex reports generation.
* Used the Dynamic Data Exchange (DDE) feature of SAS for importing and exporting data from and into SAS, MS Access, and Excel.
* Maintenance of large data sets, combining data from various sources in varying formats to create SAS data sets by using Set and Merge for generating Reports and Graphs.
* Prepared new Datasets from raw data files using Import techniques and modified existing datasets using Set, Merge, Sort, and Update, Formats, Functions, and conditional statements.
* Created complex and reusable Macros and extensively used existing macros and developed SAS Programs for Data Cleaning, Validation, Analysis, and Report generation Tested and debugged existing macros.
* Extracting data from the database using SAS/Access, and SAS /SQL procedures and creating SAS data sets.

**Environment**: SAS/BASE, SAS/MACRO, SAS/STAT, SAS/ACCESS, SAS/CONNECT, SAS/ODS, SAS/SQL, SAS/Base

**Centricity Research, Dublin, OH**

**SAS Programmer, September 2021 – August 2022**

Centricity Research is an integrated research organization (IRO) with more than 40 wholly owned and integrated clinical research offices across North America. The company conducts Phase I-IV clinical research in over 35 therapeutic areas: inpatient and outpatient; pharmaceutical, biotechnology, and medical device trials.

**Responsibilities:**

* Involved in managing randomized phase II and III clinical trials data.
* Performed statistical analysis using PROC MEANS, PROC FREQ, PROC UNIVARIATE, and PROC GPLOT, to check the data distribution of normality and homoscedasticity.
* Maintenance of large data sets, combining data from various sources in varying formats to Create SAS data sets by using Set and Merge for generating Reports.
* Developed new or modified SAS programs to load data from the source and create study-specific datasets, which are used as source datasets for report-generating programs.
* Prepared new Datasets from raw data files using Import Techniques and modified existing datasets using Set, Merge, Sort, and Update, Formats, Functions, and conditional statements.
* Created complex and reusable Macros and extensively used existing macros and developed SAS Programs for Data Cleaning, Validation, Analysis, and Report generation. Tested and debugged existing macros.
* Generated Tables, Graphs, and Listings for inclusion in Clinical study reports and regulatory submissions, participated in preparing study results as well as ISS and ISE for FDA submissions using SAS.
* Modified macros for report generation using SAS Macros as per the statistician’s requirements.
* Developed efficacy and safety tables including Adverse Events table, Laboratory Shift table, and Concomitant Medication tables.
* Generated summary reports, listings, and graphs using procedures like PRINT, REPORT, MEANS, FREQ, TABULATE, SQL, UNIVARIATE, GPLOT, and GHART.
* Wrote programs in SAS to generate reports, creating RTF, HTML listings, tables, and reports using SAS/ODS for Ad-Hoc report generation.
* Attended project team meetings, worked with Bio-Statisticians, Data Managers, and Clinical Research Managers; Reviewed and provided feedback for Data Integrity Plans.

**Bioclinica (Clario), Hyderabad, India**

**SAS Programmer, February 2020 - August 2021**

Bioclinica (Clario) is a technology company that generates the richest clinical evidence by fusing scientific expertise and global scale into the broadest endpoint technology platform.

**Responsibilities:**

* Programming to Support Phase I, and II trials.
* Contributed to the continual improvement of the department by developing efficient methods for extracting data from source systems, automating processes, developing neat and accurate end-user reports, and expanding the use of new technologies.
* Reviewed Protocols, Case Report Forms, and Statistical Analysis Plans for Clinical trials.
* Finding data issues with raw data.
* Involved in clinical trial studies, and data migration/extraction of data from Flat files, SQL Tables, and SAS datasets; created and implemented robust database applications and reporting solutions for the Analytics department.
* Used shell programming to run weekly and monthly reports.
* Generated the Tables by using Proc Freq, Proc Means, Proc Transpose, and Proc Tabulate.
* Extensively used Dynamic Data Exchange (DDE) for importing data in Excel sheets into SAS.
* Created CRT (Case Report Tabulations) datasets using CDISC standards for submissions to the FDA.
* Performed Data Validation and Data Cleaning on Clinical Trial data.
* Created SAS Customized Reports using the Data Null technique for FDA regulations; produced Tables/Listings for Integrated Summaries of Efficacy (ISE) and Safety (ISS).
* Used SAS Data Integration Studio to develop various job processes for extracting, cleansing, transforming, integrating, and loading data into Data marts and Data warehouse database.
* Extracted data sets from the server using PROC IMPORT and created datasets in SAS libraries.
* Carried out profiling analysis for customer data. Used PROC TABULATE and PROC REPORT. Standardized those reporting programs into macros.
* Coded SAS programs with the use of SAS/BASE and SAS/Macros for ad hoc jobs.
* Created charts showing performance using SAS/GRAPH.

**Environment:**Windows, MS Excel, VBA, SAS SAS/SQL, SAS/Macros, SAS/STAT, SAS/ACCESS, SAS/GRAPH, SAS E-Miner, SAS BI, SAS DI Studio, SAS Web Report Studio, PROC Reports

**Jeevan Scientific Technology Limited, Hyderabad, India**

**SAS Clinical Data Analyst, February 2017 – January 2020**

Jeevan Scientific is an Independent Clinical Contract Research Organization, offering reliable, cost-effective, and technology-driven clinical research solutions to various Clients across the globe.

**Responsibilities:**

* Reviewed the test specifications, SOP, and test documentation and performed data mapping validation; reviewed and understood the clinical protocols, SAPs, and CRFs correctly.
* Developed SAS Datasets, reviewed case report forms, case report tabulations, and SOPs for phase I and phase II clinical trials
* Validated the health care tables and wrote queries to test the applications.
* Evaluated existing data collection systems, and recommend experimental design methods for data collection, analysis, and reporting on new projects.
* Wrote code using SAS/SQL, and SAS/BASE to extract data from MS Excel files, and Oracle Databases, and prepared them for statistical analysis.
* Extracted useful data from Oracle databases using SQL, and demonstrated the data to clients Cleansed, managed, merged, and edited raw data.
* Create SAS output report to RTF, PDF, and HTML format using Output Delivery System ODS.
* Produced customized reports by using proc tabulate, proc report, and proc summary, provided descriptive statistics using proc means, proc freq, proc summary, proc univariate
* Conducted statistical analysis using SAS/STAT e.g., Proc glm, mixed, reg, freq, logistic, life test, t-test, and rank.
* Constructed the daily weekly and monthly schedules of data analysis, and followed these schedules timely

**Environment:** Windows, SAS/BASE, MACRO, GRAPH, STAT, SQL, ODS, MS Excel, MS SQL Database