

Internship Presentations

BI Intern at Family Futures and RA at Kirkhof College of Nursing

Vanaja Danda

The report presents two main tasks completed during my Internship. I worked as a Business Intelligence Intern at Family futures as well as research assistant at Kirkhof College of Nursing. In the first task, as a Business Intelligence Intern, I created and implemented some IT procedures, assisted the business intelligence team in project management duties, created user accounts for the newly joined employees, maintained master passwords. Created new reports and edited the data using new software called Bloomerang and get expertise in it. Updated computers and sent information to all the staff via email every month. Deleted the unknown users in their accounts and maintained the documentation correctly.

In the second task, I worked as a research assistant for the nursing department. My primary responsibility is to conduct online research on nursing colleges present in the United States, especially focus on the Midwest region. I collected nearly 800 universities all over the USA and then selected the top most 100 universities which are offering nursing courses. Then I perform research on magazines, nurse managed health centers and mainly focused on their strategic plans in order to develop KCON strategic plans and to increase the number of nursing students. I performed research on overall universities and then focused on Michigan universities. Selected the top 100 universities and sorted them based on the nursing program offered and the state where it is located. I stored all the data in pivot tables. Then I opened each university website and noted the key points present in their magazines, health centers and strategic plans. I presented them in front of nursing department Dean, assistant dean and a few others and they are implementing few concepts in the new building which is under construction besides CHS.

During my Internship, I developed skills like software updates, implementing new procedures, project management skills, developed communication skills by interacting with the staff. In my second task I developed an online research skills, expertise in PowerPoint and Microsoft excel mainly in pivot tables, also developed my presentation skills.

Comparing UDS-HRSA Data On the National, State and Local Level at Cherry Health

Bhanu Yandrapragada

Cherry Health is an independent, non-profit Federally Qualified Health Center (FQHC) with a primary focus on providing high-quality health services to those who have little or no access to healthcare, regardless of income or insurance status. Services provided by Cherry Health include primary care, women's health, pediatrics, dental, vision, behavioral health and mental health. During my Internship period, I was involved in UDS-HRSA (Uniform Data System-Health Resource Service Administration) project. The goal of my project is to receive federally awarded grants for the Cherry Health organization to improve and expand healthcare services for the underserved population. We collected data from HRSA and measured the clinical quality measures. Identified the measures following the Uniform Data System (UDS) reporting requirements. The UDS is a standardized reported data set that provides consistent

information about health centers. It is a core set of information, including patient demographics, services provided, clinical processes and outcomes, patient's use of services, costs, and revenues appropriate for documenting the operation and performance of health centers. UDS is comprised of twelve tables and for this project, I worked on the 6B table (i.e. on the Clinical quality of care measures). Furthermore, I compared the National, Michigan, and Cherry Health Data for the reporting period of 2015. To receive grants from the HRSA, the health center need to be a non-profit organization or community-based organization. Following the UDS reporting systems, the Cherry Health organization received \$161,117 from HRSA for the clinical quality improvers, Access Enhancers and for the high-value health center.

Internship at Deutsches Krebsforschungszentrum

Matthew Lueder

Deutsches Krebsforschungszentrum (DKFZ) is a cancer research institution located in Heidelberg Germany, on the campus of Heidelberg University. I spent last summer in Germany working with DKFZ's division of biostatistics. During this internship, I participated in two main projects. In my first project, I performed high-dimensional Cox proportional hazards regression on clinical and gene expression data taken from patients with acute myeloid leukemia. In my second project, I made performance improvements to the R package Penalized. Penalized allows users to fit penalized regression models to high dimensional data. I provided performance improvements by rewriting portions of its code in C++ and interfacing these portions with R using RcppArmadillo. My experience at DKFZ has given me a chance to develop and improve many skills which will be useful throughout my career, including programming and package creation in R, microarray analysis, survival analysis, and working with high-dimensional data.

Internship at IS RISK Analytics (ISRA)

Krishna Nadiminti

ISRA is a financial technological company that improves the profitability of trading brokers through software, risk management solutions and real-time analytics. I work in the technological department to develop and scale the software products embedded with real-time analytics. I am a software engineer who codes primarily in Java to build, design and code software applications, scale them through the Spring Framework Architecture, create Restful APIs, write distributed computing applications on the Hazelcast platform and Apache Spark. For the next future, the company is focusing on Deep Learning to predict future trends for Forex traders, classify A book, B book or C book candidates more accurately and assess market exposures with more clarity. I am actively involved in researching the accurate way to write the classifiers of the Time Series data in deep learning using the Deep4j JVM library.