Hannah Kosinovsky

Data Analyst - Bamboo Insurance
Benicia, CA
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650-200-5733

Data Analyst with proven expertise in data structures, data mining, and data cleaning. Highly skilled in translating data to aide in making strategic business decisions. Developed solutions to solve potentially costly, ineffective business processes.

Authorized to work in the US for any employer

Work Experience

Data Analyst

Bamboo Insurance - Gold River, CA
October 2019 to Present

• Provided insights to home insurance product pricing strategy design by utilizing statistical modeling and data science techniques to identify drivers of loss cost, frequency, and severity
• Improved the efficiency and flexibility of producing retention emails by creating an automated email sending pipeline using R
• Created regular monthly and quarterly reporting and dashboards to internal and external partners
• Conducted ad hoc projects in collaboration with the Actuarial, Product, Sales, and Finance groups and assisted business partners and stakeholders with data requests & analysis

Graduate Research Assistant

CA Department of Justice
October 2018 to September 2019

• Led unit to switch from SAS to R in an effort to utilize newer visualization and statistical testing packages and trained employees in basic usage.
• Created both static reports in R and dynamic reports in Tableau on criminal data that will soon be released on the CA AG's OpenJustice Website and will allow constituents to see data that they had not previously had access to.
• Wrote standardized R code for data cleaning and submission to the internal data center - saving an average of 10 hours/week in manual data entry.
• Cleaned and parsed data for over 500,000,000 criminal records; created dashboards that summarized the information in a broadly accessible way.

Business Intelligence Analyst

California Dental Association
April 2018 to September 2018

• Converted all internal reports to be dynamically linked to the company's new Amazon Redshift database so that the data reflects the most accurate/recent information - saving 3 hours of work/week and improving Tableau reporting accuracy.
• Worked with the Marketing Department to develop reporting dashboards and statistical tests to analyze changes in customer feedback from 2016-2017 from SurveyMonkey data.

• Expanded website and email reporting using Google Analytics and vendor data.

Physician Contract Analyst

Adventist Health
July 2017 to April 2018

• Converted excel spreadsheets containing over 900 separate pay specifications into one physician compensation Access Database that helped the finance department generate invoices for payroll - saving approximately 10 hours of work./week parsing separate documents and finding relevant items.
• Created VBA macros to facilitate the signing process for expiring agreements by collecting data from our SQL server; predicted potential pay for providers based on proposed terms.
• Spearheaded project that converted manual payroll process to a GUI application capable of creating reports for all medical groups and independent providers under Adventist Health by developing a database schema and working with C# programmers.

Programmer

Center for Educational Effectiveness
March 2016 to January 2017

• Employed R ShinyDashboard packages to produce high quality and interactive data visualizations for use by professors and deans to understand student demographics.
• Conducted a statistical analysis of the demographics of the applicants for the UC Washington Program to help the department understand admissions decisions.

Education

M.S. in Data Science

Southern Methodist University - Dallas, TX
December 2019

B.A. in Economics

University of California - Davis, CA
June 2017

B.A. in Statistics

University of California - Davis, CA
June 2017

Skills

- Data analysis
- Database
- Ms access
- Sql server
- Mysql
- Sql
- Sas
- Tableau

- C++
- Html
- Json
- Python
- Vba
- Xml
- Nlp
- Java
- Excel
- C/C++
- APIs
- Git
- Data Visualization

Links

http://hannochka.github.io

Publications

A Data Driven Approach to Forecast Demand

https://scholar.smu.edu/datasciencereview/vol2/iss3/1/

December 2019

Abstract. In this paper, we present a model and methodology for pre- dicting the following quarter's product sales volume. Forecasting product demand for a single supplier is complicated by seasonal demand variation, business cycle impacts, and customer churn. Based upon a Dense Neural Network (DNN) machine learning model, we created a prediction model that considers cyclical demand variations and customer churn. Using the previous five years of parts sales data for a supplier to the oil and gas industry in North America, we found a novel method to predict demand with a minimal error rate [MAE of 0.65]. The Dense Neural Network model performs the best among the other machine learning models we tried in prediction, and additionally, all machine learning models perform better than a non-machine learning solution.

Additional Information

AREAS OF EXPERTISE

- Statistical Reporting
- Database Query/Management/Design
- Data Analysis
- Advanced Excel Formulas/Tools

Programming Skills

- R, Python, Stata, SAS, Tableau
- C++, Processing+, Java, VBA
- NLP, HTML, XML, JSON
- SQL: MS Access /SQL Server, MySQL, SQL Developer