CHRIS RAHN

DATA SCIENTIST

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chris-rahn ChrisRahn

SUMMARY

Data scientist with five years' experience in statistical data analysis and modeling, data visualization, programming, hierarchical systems analysis, and risk management. Expertise in Data Science, Machine Learning, Python, SQL, and advanced technical writing.

SKILLS

DATA SCIENCE: Neural Networks / Machine Learning, Probabilistic Modeling, Bayesian Inference, ANOVA, Hypothesis & A/B Testing, Regression Analysis, Support Vector Machines, K-Means Clustering, Decision Trees, Natural Language Processing, Time Series Analysis, Graph Theory, Linear Algebra, Fault Tree Analysis
PROGRAMMING: Python, SQL, NumPy, pandas, Tensorflow / Keras, MongoDB, Flask, HTML / CSS, Advanced MS Excel, Command Line Interface, MATLAB, Tableau, R, SAS / SPSS
MARKETING: Market Research, Survey Design and Analysis, Design of Experiments

EXPERIENCE

Data Science
San Francisco, CA
Galvanize
Jan. 2019 to Apr. 2019

Completed 13-week intensive Data Science Immersive study program.

- Capstone Project: Created a digital image processing web application that uses a neural network model to detect, simplify, and visualize the embedded geometry of a photo's subject. The app's portable back-end allows easy pre-processing for other apps or online image handling. (Link: https://github.com/ChrisRahn/NN-image-processing)
- Case Study: Built a classification model with user data from a local ride-sharing company to identify customers at high risk of churning
- Case Study: Built a web application to automatically monitor event postings and identify potential fraud
- Case Study: Performed regression analysis to model and predict prices of heavy industrial equipment and discover under- and over-valued sales opportunities

Data Analyst / Nuclear Engineer
Campbell, CA
JENSEN HUGHES
June 2013 to Nov. 2018

Five years' nuclear utility data analysis, risk management, probabilistic risk assessment, statistics, detailed hierarchical systems analysis, logic modeling, fault and event tree development, and engineering calculations for fire and seismic risk modeling.

- Built and and maintained predictive fault tree models to discover weaknesses in client site risk profiles and recommend improvements
- Advised corporate and engineering descision-making through both formal evaluations and ad-hoc data insights
- Processed statistical data to incorporate historical evidence into models and forecast future risk movements
- Maintained, validated, and updated large-scale SQL databases using queries and macros
- Wrote highly technical reports and notebooks to document modeling methodology, assumptions, and conclusions

Marketing Data Analyst
Mountain View, CA
Direct Marketing Research Associates
Apr. 2013 to June 2013

Marketing data analysis and research support for a major national client, First Republic Bank.

PROJECTS

Reliability, Availability, & Maintainability Modeling
Mar. 2018 to Nov. 2018

Developed a novel method to assess the reliability, availability, and maintainability of a gamma ray simulator designed by L-3 Applied Technologies. The assessment blended several techniques to synthesize component failure data into a Monte Carlo state machine model used estimate the machine's future performance.

Fire Probabilistic Risk Analyses
Mar. 2014 to Nov. 2018

Developed multiple large-scale, multi-year fire risk analyses for several Exelon commercial nuclear power plants. These extensive projects required many engineering and data science skills, particularly database management, importance and dependency analysis, and statistical data processing.

Marketing Research and Design
Apr. 2013 to June 2013

Advised development of a marketing product for First Republic Bank. Through research, I was able to construct a model to quantify the abstract concept of "innovation" of Bay Area companies used to advertise business loans.

EDUCATION

University of California - Berkeley
B.S. Chemical Engineering