JUN WANG
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QUALIFICATIONS & SKILLS

- Solid knowledge of mathematical/statistical modeling.
- Strong problem solving skills and motivated quick learner of new techniques and knowledge.
- Proficient user of Python/numpy, pandas, scikit-learn, tensorflow, django, plotly, SQL, Javascript.
- Adept user of Linux, Windows, MS Office (Excel, Word, PowerPoint) and others.

WORK & RELATED EXPERIENCE

Senior Data Scientist
Box, Redwood City, CA, Jul. 2018 – present

- Design a web personalization system to automatically deliver right content to right customers at the right time every day. This system boosts Box conversion rate 2% which related with $5M pipeline. This system is built on python end-to-end, and leverages propensity model, recommendation ML model and Bayesian model to achieve the goal.

Staff Algorithm Engineer
Alipay, Alibaba, Hangzhou, China, Oct. 2017 – April 2018

- Designed an anomaly detection algorithm that combines invariant relationship network, LSTM, and logistic regression model to real-time monitor large amounts of diverse transaction data. This algorithm was implemented in Alipay data monitor platform, which largely reduced the false positive and improved the recall rate as well.

Senior Manager, Data Scientist
Science Team, AIG, New York City, NY, Mar. 2017 – Sept. 2017

- Developed a feed forward neural network to predict ultimate losses of workers compensation claims. The prediction is used in workers compensation pricing model.
- Improved my fuzzy match algorithm to link AIG works compensation data to occupational safety and health administration data.
- Text mined claim notes to extract information that drives severe loss cost.
- Lead a team to build pricing models for AIG healthcare underwriters.

Manager, Data Scientist
Science Team, AIG, New York City, NY, Jan. 2015 – Feb. 2017

- Led a team to detect fraudulent medical providers by applying PRIDIT unsupervised learning technique. Developed a name/address fuzzy match algorithm to link AIG internal data to CMS data for identifying medical providers. This project successfully detected 15 fraudulent medical providers that are related with $20M.
- Designed an appraisal algorithm to evaluate medical providers' performance. Applied propensity score technique to reduce the selection bias. This algorithm is used in AIG medical management service.
- Led a team to build pricing models by applying regression with shrinkage method for AIG general liability underwriters. These models are implemented in .NET wrapper.
- Organized a business research forum. Invited internal and external speakers to share their knowledge related with machine learning and statistical techniques.

Senior Quantitative Analyst
Science Team, AIG, New York City, NY, Jul. 2013 – Dec. 2014

- Applied Gradient Boosting Tree to predict the claim severities. Using TF-IDF and regression with shrinkage technique in Python to extract valuable information in adjuster notes which boosted the severity prediction accuracy. Cooperated with IT team to implement this model into AIG claim web service, which helps claim operation team to assign claims to the most appropriate adjuster for better claim handling.
- Led a data team to extract, clean and reconcile claim data for supporting the back-end of Claims map, which is a Zillow like visualization tool to monitor AIG claims.

Senior Research Consultant
Middle Market, Business Insurance R&D, Travelers, Hartford, CT, Jan. 2012 – Jun. 2013

- Applied Elastic Net regression to built pricing models for Travelers commercial auto and general liability insurance. This model is a benchmark tool to enhance underwriter-rating plan.
- Applied logistic regression with L1 penalty to derive deductible factors, which is used in underwriter rating plan.
- Developed B-spline transform code in SAS. Transformed continuous features significantly improved accuracy of pricing model.

Research Consultant
Small Business, Business Insurance R&D, Travelers, Hartford, CT, Aug. 2010 – Dec. 2011

- Applied double generalized linear model to build pricing tools for Travelers commercial property insurance
- Built spatial smoothing tools by using thin plate spline technique in R to derive territory rating index, which is used in property pricing tools.
- Applied CART and logistic regression to identify potential high risk polices. Underwriters use this approach to screen out bad polices.

Internship
Travelers, Hartford, CT, May. 2010 – Aug. 2011

- Designed an algorithm to optimally combine the individual account's experience with the predictive model estimates.

Research Assistant
Department of Mathematical Sciences, Ball State University, Muncie, IN, Jan. 2009 – May. 2010

- Applied GAM and DGLM models to develop a geospatial-smoothing tool for Travelers sponsored project.
- Applied copulas to simulate the correlation between frequency and severity of insurance claims.

EDUCATION

Master of Art, Ball State University, Muncie, USA

- Major: Statistics

Master of Science, Fudan University, Shanghai, China

- Major: Mathematics

Bachelor of Science, Yunnan University, Kunming, China

- Major: Mathematics