

BRIAN CHI YAN LI

Proactive, analytical and meticulous professional with a solid understanding of statistical programming and machine learning concepts. Able to utilize programming languages including R, Python and SAS to support analytical procedures, start to finish integration and business improvements. Persevere problem solver with a strong ability to abstract programming challenges into generic solutions, discover automation opportunities and formulate a more streamlined solution to improve code efficiency.



EDUCATION

05/2019
|
08/2017

Master of Science in Statistics (GPA: 4.0)

North Carolina State University

📍 Raleigh, NC

- With a focus in statistical programming

05/2014
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08/2012

Master of Science in Engineering Management CO-OP (GPA: 3.5)

Purdue University

📍 West Lafayette, IN

05/2012
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08/2007

Bachelor of Science in Chemical Engineering (GPA: 3.6)

Purdue University

📍 West Lafayette, IN

- Minor in Mathematics and Economics



WORKING EXPERIENCES

Current
|
08/2021

Principal Data Scientist

Verizon

📍 Lake Mary, FL

- Apply statistical models including Logistic Regression, Generalized Linear Models with Regularization (Lasso/ Ridge), CART, Random Forests, Extreme Gradient Boosted Tree to develop production ready score cuts in consumer credit and fraud red flag policy
- Wireless involuntary churn short term forecast using Python random forest model and Collection Strategy Timeline
- Wireless involuntary churn long term forecast using Python Cox proportional hazard model and gross adds
- Automate the update of Collection Strategy Timeline table by running dynamic queries generated from flow data extracted from non standardized excel files
- Build a Qlike dashboard tool with REST API to automatically update churn forecast trending vs budget to client, eliminating some manual update work
- 5G Home credit modeling and optimization to determine deposit schemes that maximize cash flow given variable costs and write off probability
- Translate R code of Loan Loss Forecasting to Python and migrate from Unix server to Domino data lab
- Cross train other team members on scorecut modeling/generation with new EFX Fraud Superscore and Neustar score
- Act as subject matter expert on probability scoring for accuracy monitoring and credit offer reconciliation against intended strategy
- Conductor of the Oxford Economics macroeconomic correlation analysis required for SOX control since 2020, in which a novel way is used to mitigate the outlier effects from highly volatile post-COVID attributes



CONTACT

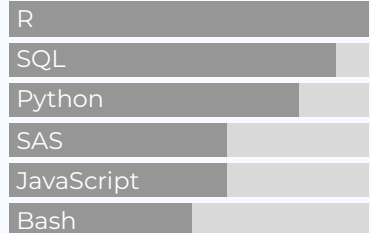
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☎ 765-413-3280

🌐 github.com/ziyong68

PROGRAMMING SKILLS



OTHER SKILLS

Software Tools: Excel, PowerPivot, Power BI, MATLAB, PowerPoint, Tableau, Photoshop, ExpoCAD, Aspen Plus

Reporting Systems: SAP Business objects, Eclipse BIRT, IBM Maximo, IBM Tririga, Viewworks GIS

Languages: English, Mandarin, Cantonese

CERTIFICATIONS

Lean and Six Sigma Green Belt Certificate, Purdue University

Managing Big Data with MySQL, Duke University

Python Programming Certification, University of Michigan

FCRA Data User Certification program through CDIA

08/2021
|
01/2019

Data Scientist

Verizon

📍 Lake Mary, FL

- Implement Multi Adaptive Regression Spline (MARS) model to forecast performance on variable term loans in order to predict exposure at default for 6-, 30- and 36-month device payment plan loans
- Optimize FraudIQ score threshold of red flag policies to stop identity frauds from entering credit check and prevent losses (estimated with 700K to 1 million per month)
- Transform Ignite credit bureau data assets using Impala SQL in Hadoop clusters and perform quality control & data deduplication
- Initiate the use of R markdown with knitr during CECL auditing to automatically generate dynamic documents that integrates model statistics, interpretation and validation plots with inline code
- Automate data transfer between databases and SQL queries to feed a summary dataset that refreshes on a daily basis to monitor consumer wireline payment
- Develop a new scorecut automation to generate post NITP v2 score launch adapting both volume neutral and risk neutral strategy at different time
- Create new R functions for team library. Examples include size compression of big GLM model RDS objects for more efficient storage, as well as empirical probability density/ cumulative distribution functions cast on grouped data

01/2019
|
08/2014

Project Planner

Walt Disney Parks & Resorts

📍 Lake Buena Vista, FL

- Project lead for strategic facilities planning of Disney Springs and ESPN Wide World of Sports (\$15M annual)
- Develop BIRT user reports using SQL to query data and create custom functionalities with JavaScript under Eclipse IDE
- Develop Business Objects Webi reports to analyze budget investment pattern and create visualization for executive review
- Perform data cleansing and migration from a project based (Maximo) to an equipment-based database application (Tririga)
- Analyze maintenance frequency data to create lifecycle strategies for facades and swimming pools at Parks and Resorts
- Developed an interactive PowerBI Dashboard to summarize water quality and pollutant distribution of Reedy Creek rivers
- Initiated projects to replace sport field light fixtures, with a total savings of 44% of the original energy consumption
- Developed an Excel macro that automatically recalculate and plot lifecycle costs of ownership over time based on user input on lifecycle activities placement

08/2014
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09/2013

Professional Intern

Walt Disney Parks & Resorts

📍 Lake Buena Vista, FL

- Analyzed conditions of various property assets (e.g. roofing, light poles, HVAC systems) and predict the timing of next major maintenance or upgrade
- Collaborated with an architectural consulting firm to transform Disney roof survey results into quantifiable data, which were utilized to plot roof degradation curves for different materials
- Identified approximately 920 projectors/screens across locations and created an inventory with comprehensive specifications and warranty documentation

08/2013
|
05/2013

Special Events Intern

Indiana Black Expo

📍 Indianapolis, IN

- Coordinated and implemented multiple large-scale events including the Employment Opportunity Fair in Indianapolis
- Maintained databases of exhibitors, managed inventory space and designed exposition spaces via ExpoCAD software



RESEARCH & PROJECTS

Current

R Shiny App for Forest Fire analysis

Github

📍 <https://brianli.shinyapps.io/Forest-Fire-Investigation/>

05/2012
|
01/2012

Study of Biomass Torrefaction

Purdue University

📍 West Lafayette, IN

- Applied linear regression to determine the kinetic order of Fatty Acid Methyl Ester (FAME) production and optimize yield

05/2012
|
01/2012

AICHE Chem-E-Car Design

Purdue University

📍 West Lafayette, IN

- Drove a Lego built pneumatic engine with CO2 released in an acid-base reaction under controllable conditions. The team was awarded a second place (2/10) recognition in the regional competition held in the University of Akron