ZHAOCHENG(LEO) LI

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SUMMARY

- An individual who is full of curiosity, passion about data science and app development.
- Research experiences in machine learning and database system at the University of Victoria.
- Website development experiences using *HTML5*, *CSS3* and *JavaScript*.
- Fundamental and growing experiences in web development with *REACT*, *Node.js*, *Python Django* and *D3.js* visualization.
- Developed programming skills in *Python*, *Java*, and *Shell scripting*.
- Proficient in multiple operating systems (*Windows*, *Linux* and *macOS*), and interactive computing environments (*JupyterLab*, *IBM Skills Network Labs, IBM Watson Studio*).
- Proficient in data management using *Excel* and database systems (*Oracle SQL*, *MySQL*).
- Competent in data analysis using *Python*, *R*, and Python modules *Numpy*, *SciPy*, *Sympy*, *Pandas*, *Matplotlib* and *Scikit-learn*.

EDUCATION

Bachelor of Science, June 2019
Major Mathematics and Computer Science
Major Statistics
University of Victoria, Victoria, BC

Course Focuses:

- Mathematical Modelling
- Design and Analysis of Experiments
- Operating Systems
- Applied Regression Analysis
- Mathematical Statistics
- Database Systems

- Data Analysis
- Computer Communications & Networks
- Machine Learning
- Introduction to Artificial Intelligence
- Numerical Methods
- Nonlinear Dynamical Systems & Chaos

RELEVANT EXPERIENCES

Web Developer, September 2018 – June 2019
Self-employed, Victoria, BC, CANADA

- I started creating and personal websites by using HTML5/CSS3, React and Node.js for students and coworkers who want to have platforms to present their experiences and achievements.
- I am able to create dynamic, interactive interfaces using React, Node.js and CSS3, and also to visualizing analysis outcomes using D3.js.
- My website is: https://zhaochengli.github.io/

Research Assistant, Simulation Group, Dec. 2018 – Feb. 2019
University of Victoria, Victoria, BC, CANADA

- Used **machine learning** technique and **simulation** study in R.
- Applied 6 HIV genomic datasets from http://imlspenticton.uzh.ch:3838/conquer/ to compare the performance of different models, we choose Lasso, linear regression and elastic net models as our targets.

- I simplified the complex genetic data structure by using the mutation matrix in the HIV datasets. We use the matrix to fit models by doing cross-validation, then we can compare the performance of selected models.
- I used the simulation study on the models to simulate the continuous outcome data, then we obtain the performance of classification and signature gene selections under different gene correlation conditions.
- Results are evaluated using statistics MSE, AUC, Wilcoxon tests, misclassification rates, box plots. The result shows the elastic net model performs better on the datasets and the grouped signature gene selection predicted a better outcomes then the separated gene selections.

Project Assistant, Athlete Statistics, Sept. 2017 – Dec. 2017
University of Victoria, Victoria, BC, CANADA
- Designed and constructed **relational tables** for 10 basic statistics for each of nearly a thousand athletes of basketball association for two seasons
- Queried the signature data of interest and visualized them using charts and scatter plots. This provides a straightforward way to evaluate players' performance and efficiency on the court in any needed perspective.
- Analyzed data and compared the statistics over the boxplots, we provided the class an analytical way of understanding games and athletes' performance.

OTHER EXPERIENCES
Store Front, Mar. 2019 – May. 2019
Tim Hortons, Victoria, BC, CANADA
- We worked hard and give customers the best experiences with our hospitality and genuinely customer services.
- We provide the best products by strictly following protocols and commitments to the customers.

Sales Assistant, May 2016 – Dec. 2016
CNIB, Victoria
- Communicated with customers having vision problems, then analyzed their symptoms, so we can provide equipment accordingly.
- Applied Excel to keep sales records, and users' information
- Customer services through phone calls, gaining feedback from customers after purchase.

ACHIEVEMENT
- Certification holder of IBM Data Science, 2019

ACTIVITIES
- Volunteer, Oak Bay Volunteer Service, 2017-2018
- Routine Event Volunteer, Art Gallery of Greater Victoria, 2018-2019
- Volunteer, Pacific Institute for the Mathematical Sciences (PIMS), 2018-2019
- Certificate Candidate of Cisco Certified Data Centre (CCNA), 2019