DANIEL YANG
STATISTICIAN

daniel.yang@ucalgary.ca
error.in.simulation
error.in.simulation.github.io
5878960374
102 Royal Ridge Rise NW

EDUCATION

University of Calgary Sept. 2014 to Oct. 2021

Masters of Science Statistics 2021
Bachelors of Science Statistics 2019
Bachelors of Science Applied Mathematics 2019

Relevant Classes: Statistical/Machine Learning, Generalized Linear Models, Bayesian Statistics, Stochastic Processes, Monte Carlo computation

SUMMARY

- Formally trained statistician with exposure to cross-disciplinary research and a keen interest in computer science, data science and data engineering
- Familiar with low level/embedded software development via the pursuit of personal and academic projects
- Currently studying cloud database management and AWS development
- Experience in leadership roles, liaising needs between graduate students, faculty members, and administration

SKILLS

COMPUTER LANGUAGES: Python (scikit-learn, matplotlib, pandas, PyTorch), R (RMarkdown, Tidyverse, RStan)
DATABASES: PostgreSQL
TECHNOLOGIES: Git, LaTeX, Tableau
CERTIFICATIONS: Actuary Exam P

EMPLOYMENT

UNIVERSITY OF CALGARY

Graduate Teaching Assistant - Data Science — Sept. 2020 to Current

- Graduate teaching assistant for the professional Data Science program and the Masters program in Data Science
- Primarily assisted in teaching statistical inference and supervised learning methods in R, in addition to usage of RMarkdown and the Tidyverse package

Teaching Assistant - Introductory Statistics — Sept. 2019 to May 2019

- Teaching assistant to the introductory statistics class available to all undergraduates
- Assisted in teaching principle, foundational statistical concepts as well as a precursory foray into statistical software (minitab and R)
- Additional responsibilities include holding labs (teaching sessions) and grading coursework for over 100 undergraduates

PARKING ON THE GO

Intern — Sept. 2018 to Dec. 2018

- Developed a detailed use case spreadsheet of over 70 scenarios alongside appropriate solutions and risk matrices
- Consultant for app development and usability
- Created modern designed timelines and Gantt charts to visualize rollout phases and milestones for investors

PROJECTS

COMPUTER VISION - RCNN/YOLOV5 — Jan. 2021 to May 2021

- Led group of four to detect the presence of facial masks as well as the correct classification of correctly worn facial masks from an image set of 853 taken from Kaggle
- Implemented the YOLOv5 and RCNN algorithms via PyTorch for this task and wrote additional code for image augmentation intended for future work
- The models produced an overall score of 82.8% Precision and 63.2% Recall, validating the the efficacy of the model

BAYESIAN HIERARCHICAL MODELING — Sept. 2019 to Dec. 2019

- Re-analyzed epileptic data from Thall and Vail (1990) using Bayesian hierarchical models
- Obtaining parameter values and credible intervals required use of Markov Chain Monte Carlo (MCMC) and corresponding packages in R

PERSONAL WEBSITE — Jan. 2020 to Current

- Website that serves as both a written repository of projects and a personal portfolio

AWARDS

University of Calgary · JASON LANG SCHOLARSHIP — Sept. 2018

Received the scholarship for 3 consecutive years on the basis of academic excellence

ACTIVITIES

GUMS · President — Sept. 2020 to Sept. 2021

- Headed the Graduate University Mathematical Society (GUMS), a student led club to advocate the interest and well-being of graduate students in the faculty of math and statistics at the University of Calgary
- Collaborated, lead, and organized with fellow members to create online events that focused on academic research, industry skills workshops, and general entertainment
- Partially managed finances as well as funding applications

STATISTICAL SOCIETY OF CANADA · Career Networking Host and Presenter — May 2019 to May 2019

- Co-hosted the career networking event as well as chairing the non linear model presentation for the annual Statistical Society of Canada (SSC) meeting in 2019