Li-Yin(Lily) Young

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EDUCATION

University of Colorado Boulder, Boulder, CO, U.S.A.
Master of Science, Applied Math, August 2018- May 2020
University of Colorado Boulder, Boulder, CO, U.S.A.
Master of Science, Computer Science, Augst 2013- June 2015
Chang Gung University, Taoyuan, Taiwan
Bachelors of Science, Information Management, September 2008- June 2012

Work EXPERIENCE

Data Scientist and PHP Developer   Main Street Exchange
Boulder CO.   Jun.2016-Aug.2018
I joined the team for developing agile website for enterprise commerce applications to processing warehoused data . I was responsible for maintaining the query performance and user interface design.

Machine Learning Engineer   TopicTechnology
Boulder CO.   Jan. 2016-May. 2016
Sentiment analysis incorporating social networks.

Machine Learning Developer   Millennium Engineering & Integration
Summer Intern
Colorado Spring, CO.   Summer 2014
Exploring the temptation of purchasing of customers by building the model combined with support vector machine(svm) and autoregressive model to analyzing the purchasing data from customer at each day.

Publication

The Effect of Moderator bots on Abusive Language Use
2018
Proceedings of the International Conference on Pattern Recognition and Artificial Intelligence. ACM, New York, NY, USA.
We implemented a regression discontinuity design and conducted interrupted time series analysis to estimate the effect of Automoderator bots on word-quality improvement availability.

Projects

Using Wassersein GAN to approximate stochastic process
Jan. 2020-Present
The project is worked with Dr. Yu-Jui Huang. We proposed the method based on generative adversarial Networks(GANs) to learn the stochastic process such as geometric brownian motion and Ornstein-Uhlenbeck(OU) process.

Deep learning for partial differential equations
July. 2018-Present
The paper is working with Professor Xiao-Chun Cai and Professor Daniel Appelö. The project is worked with Dr. Xiaochuan Cai and Dr. Daniel Appelö on designing generative adversarial nets (GAN) type deep neural network for approximating advection and diffusion type PDEs. Since then, we consider the spaces of functions for multivariate functions that is approximations in high dimension and presents the method that the curse of dimensionality is lessened by establishing a connection with sparse grids.

Analysis of Markov regime switching model to Stochastic Differential Equation
March. 2017- Nov. 2019
The project is worked with Dr. Yu-Jui Huang. We generalize the algorithm that allowing Stochastic differential equation (SDE) to adjust parameters based on Markovian process in high dimensions. The goal of the project is to build the continuous time

regime switching model to estimate the data which belongs to stochastic process.

Engineering
SKILLS

Languages: Python, C++/C, HTML/CSS, Javascript, SQL
Deep Learning Library: tensorflow, Keras, skit-learn
Data Science: machine learning, data mining, statistical model