Runzhuo (Royce) Yang

6031 S Ellis Ave, C616, Chicago, IL 60637 • (408) 898-8188
royceyang@uchicago.edu • home.uchicago.edu/~royceyang

"Data science enthusiast with industrial & research experiences looking for full-time opportunities within innovative teams."

EDUCATION

The University of Chicago, Chicago, IL | Dean's List Scholar 2018 – 2019
(Double Major) B.S. in Computer Science with specialization in Data Science and B.A. in Economics — expect graduation June 2020

PROFESSIONAL EXPERIENCE

General Electric Company Waukesha, WI
Data Science Intern in Software Group June 2019 – Aug 2019

- AI and Big Data used for power generation engine analytics
- Used stacked ensemble methods to build predictive analytics for remaining useful oil life, saving customers $2000/yr/engine
- Constructed generative adversarial networks for anomaly detection in the engines' internal combustion process

Midea Group (No. 312 in Fortune 500 in 2019) San Jose, CA
Machine Learning Intern in Computer Vision Group June 2018 – Sept 2018

- CNN for computer vision tasks: facial recognition and object detection
- Applied machine learning with 20k+ image dataset to teach devices to recognize human actions (e.g. running on treadmill)
- Trained and implemented a CNN for object recognition, using Keras and TensorFlow, for embedded Linux (Raspberry Pi and TX2)

PROJECTS

Fraud Detection in Credit Card Transactions July 2019 – Present

- Explore the application of LightGBM on credit card transaction data for fraud detection

Estimating the Effect of News Articles on Stock Prices Jan 2019 – Mar 2019

- Applied machine learning on market data and news data processed with sentiment analysis to discern key market indicators
- Weighted SVM and Random Forest with statistical model (logistic regression) to improve OOB prediction accuracy (~70%)

Predicting Airbnb Ratings with Public Housing Data Feb 2019

- Used LASSO for variable selection and found super host indicator and sentiment analysis of reviews to be the most important
- Performed regression analysis and random forest to achieve an R^2 of >0.3 when regressed on hold-out groundtruth ratings

ACTIVITIES

Edge Entrepreneurship | Senior *Associate* Feb 2018 – Apr 2019

- Worked in teams on start-up and portfolio management consulting under mentorship of professional consultants from Polsky
- Managed year-long start-up project for the College New Venture Challenge in search of venture capital

University of Chicago Badminton Team | *Captain* Mar 2017 – Mar 2019

- Led the UChicago badminton team in the 2019 Yonex Collegiate Championships in Schaumburg, IL

CONFERENCES

Uncommon Hacks 2019 Feb 2019

- Won first place for the main category by presenting a computer vision-integrated augmented reality project

Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science Nov 2018

- Invited to present as a guest speaker on action recognition within Computer Vision at the University of Washington in St. Louis

University of Chicago 5th Annual Undergraduate Research Symposium Sept 2018

- Selected as a distinguished undergraduate in research to present recursive deep learning model-enhancing algorithms

SKILLS

Programming Languages: R, Python, SQL, Stata, C, Java, HTML/CSS, Javascript
Data Science Methods: Gradient Boosting, Autoencoders, Ensemble Learning / Stacking, Bootstrap Aggregation, Cross Validation, Regularization, Logistic Regression, Linear Regression, Neural Networks, Factorization / PCA, Random Forest, SVM, Hyperparameter Tuning, Local Search Algorithms / Hill Climbing
Economics & Data Science Coursework: Econometrics, Statistical Modeling, Linear Algebra, Data Construction and Interpretation, Applications of Econometric and Data Science Methods, Economic Analysis, Big Data
Computer Science Coursework: Machine Learning, Data Structures, Algorithms, Data Visualization, Computer Vision
General Skills: Agile, Teamwork, Presentation, Documentation, Retrospection
Language: Native: English, Secondary: Chinese and Spanish

WEBSITE available at home.uchicago.edu/~royceyang – check it out for samples of my work!