

Yu Pei

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SKILLS

- Problem solving with data, experiences with various machine learning algorithms
- Proficient in Python(numpy, pandas, sklearn), R, SQL and C++
- Comfortable writing scripts for data cleaning, exploratory analysis
- Statistical modeling(Linear mixed models, ANOVA, generalized linear models)

EDUCATION

University of California, Davis

Master of Science in Biostatistics

Davis, CA

June 2015

Relevant Coursework: Machine Learning, Bayesian statistics, Algorithm Design, Data structure

Sun-Yat Sen university

Bachelor of Science in Biochemistry and Statistics

Guangzhou, China

June 2013

WORK AND PROJECT EXPERIENCES

Bioenergy crop adoption & Environmental Impact Modeling, UC Davis

June 2014- Present

- Rewrite mixed-integer optimization model with Python, parallelizing simulations
- Process and visualization of large volume of climate gridded data with R and SQL
- Assisting crop budget, economic impact, and yield, environmental impact analysis
- Collaborated with a team of scientists, quantified the uncertainty of the models.

Kaggle competitions

Present

- Rainfall estimation on a region from Doppler radar information, validated with weather station data
- Text data analysis with TF-IDF, word2vec and SVM classification(NLTK, sklearn with Python)
- Diseases epidemic prediction with regression analysis(generalized additive model, boosting trees)
- Ads click through rate(CTR) predictions with online learning(40GB data stream, millions features)

Online course projects

- Practice on programming(object oriented design using C++)
- Software hardware interface(memory hierarchy, call stack)
- Algorithms(dynamic programming, randomized algorithm)
- Bioinformatic Algorithms(sequence alignment, SNP detection etc)

LINKS

- Github: <https://hitchpy.github.io>
- LinkedIn: <https://linkedin.com/in/yupei>
- Kaggle: <https://www.kaggle.com/hitchpy>