Kehsin (Esther) Su

+1-510-993-7557 | esther730@berkeley.edu | 23920 Anza Ave, Torrance, CA, 90505 LinkedIn Profile: https://www.linkedin.com/in/esther-su-asa-0730/

4 years of experience in analytics; Experienced with large-scale data and end-to-end machine learning systems

PROFESSIONAL EXPERIENCE

Boston Consulting Group (BCG), Digital Ventures

Manhattan Beach, California

Data Scientist II

Feb 2019 - Now

Areas: Computer vision, Natural language processing, Reinforcement learning (Optical flow, RetinaNet, BERT, TFIDF, BIGRU, DAG, elastic search, LTR, NN, Thompson sampling)

- Built the geofencing system to prevented 99%+ incidences in the factory (object tracking)
- Built the 1st generation QA system to reduce 20% customer waiting time and knowledge transfer cost
- Integrated a LTR model to the search ranking system to optimize 5% of user feedback metric
- Improved the tire recommendation power by filling thousands of data gaps with imputation and web-scrapping
- Built the scoring algorithms to integrate and normalize the business opportunities from different data sources
- Recommended personal sleep contents with cold-start issue by a reinforcement learning algorithm

Mercuries Life Insurance Company Ltd.

Taipei, Taiwan

Product Developer - Actuarial Analyst, ASA

Sep 2014 - Jun 2017

Area: GLM, Survival analysis, Stochastic analysis, Multivariate/Univariate analysis (Poisson/Gamma regression, Chain ladder, Markov chains, Bayesian, Bootstrap, Back-testing)

- Developed a novel whole life cancer product (UBAC) to increase customer acquisitions and revenues
- Executed experience study, sensitivity analysis, cash flow forecasting, and simulation for risk and profit optimization

Boston Consulting Group (BCG), Digital Ventures

Bellevue, Washington

Data Scientist (Intern)

Jun 2018 - Aug 2018

Area: Time Series Analysis (LSTM, dynamic regression, threshold autoregression, grey forecasting model (GM(1,1))

- Created benchmarks for the water auto-fill system to save 10% of cost in the green house
- Implemented a new grey forecasting model to deal with limited data and improve 38% of accuracy

Intento Berkeley, California

Data Scientist (Intern, co-op with Division of Data Science at UC Berkeley)

Feb 2018 - May 2018

Areas: AB testing, Recommendation, Natural language processing (Sentiment analysis)

• Designed a customer-facing sentiment APIs experiment to distill customer satisfaction for further recommendation

Disease Surveillance And Risk Monitoring (DiSARM) Platform, UCSF

San Francisco, California

Researcher (part-time)

Feb 2018 - May 2018

Areas: Spatial analysis, Machine learning-classification, Data Visualization

- Classified building types in Africa with OpenStreetMap to implement the malaria control into household level
- Combined Leaflet and Shiny to visualize the classification model into a web app to deliver insights at scale

Department of Statistics, University of California Berkeley

Berkeley, California

Statistical Consultant (part-time)

Aug 2017 - Dec 2017

Areas: Nonparametric analysis, Casual inference (Wilcoxon test, meta-analysis, mediation analysis)

• Assisted the Compassion Cultivation Training(CCT), medical and psychological research

EDUCATION

University of California Berkeley, California, USA

Dec, 2018

Master of Arts (M.A.), Statistics

National Taiwan University, Taipei, Taiwan

Dec, 2016

Computer Science and Information Engineering (Information System Training Program Certification)

National Taipei University, Taipei, Taiwan

Jun, 2014

Bachelor in Business Administration, Statistics (AACSB accredited)

PUBLICATION

American Society of Tropical Medicine and Hygiene 67th Annual Meeting Poster Session C 1507. Improving
precision of health campaigns through an API for identifying residential buildings. Su K, Andrade-Pacheco R, Li E,
Liu L, Feng M, Sturrock HJW

TOOLS AND SKILLS

Python, R, VB, SAS, C, MATLAB, SQL, NoSQL(MongoDB), Unix Shell Scripting; Spark, Keras, Git, REST API(Flask, Falcon), Docker; AWS(S3, SageMaker, EC2, EMR), GCP(BigQuery, Kubernetes, Data Studio);