YUSAN LIN

yusanlinn@gmail.com ⋄ www.yusanlin.com

Last updated: April 18th, 2021

EDUCATION

The Pennsylvania State University August 2012 - December 2018
Ph.D. in Computer Science and Engineering
Dissertation: "Machine-Learning-Based Approaches for Learning Marketing Strategies"

National Central University August 2008 - June 2012
B.S. Computer Science and Information Engineering
Presidential Award (top 3 students)

WORK EXPERIENCE

Visa Research December 2018 - Present
Staff Research Scientist and Technical Team Lead *Palo Alto, CA*

- Developed fashion recommendation system using deep learning models
- Published two workshop papers in CVPR 2019 and KDD 2019
- Published two full research paper in The WebConf 2020 and SIGIR 2021
- Led the Security Analytics team, developed and deployed employee attrition prediction model and peer grouping detection model
- Leading the Anomaly Detection Platform team, developed and deployed change point detection and feature weighting pipeline for multivariate time series
- Filed four provisional patents:
  System, Method, and Computer Program Product for a Set of Items to a User (Ref. number: 3689US01)
  Methods and Systems For Peer Grouping in Insider Threat Detection (Ref. number: 4113US01)
  System, Method and Computer Program Product for User Network Activity Anomaly Detection (Ref. number 5156US01)
  Structured Graph Convolution Networks with Stochastic Masks for Network Embeddings (Ref. number 5508US01)

Visa Research Feb 2018 - May 2018
Research Scientist Intern *Palo Alto, CA*

- Filed one provisional patent: *System, Method, and Computer Program Product for Predicting User Preference of Items in an Image* (Ref. number: 2957US01)

PUBLICATION

- Huiyuan Chen, Lan Wang, **Yusan Lin** Michael Yeh, Fei Wang and Hao Yang, *Structured Graph Convolutional Networks with Stochastic Masks for Recommender Systems*, International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 21), online, Jul. 2021 (to appear)
- **Yusan Lin**, Peifeng Yin, Wang-Chien Lee, *Economic Worth-Aware Word Embeddings*, IEEE International Conference on Data Science and Advanced Analytics (DSAA 20), Sydney, Australia, Oct. 2020
- **Yusan Lin**, Maryam Moosaei, Hao Yang, *OutfitNet: Fashion Outfit Recommendation with Attention-Based Multiple Instance Learning*, IW3C2 The Web Conference (WWW 20), Taipei, Taiwan, Apr. 2020

- **Yusan Lin**, Hao Yang, *Next-Season Design Prediction on High-Fashion Runway*, ACM SIGKDD Workshop on AI for Fashion (KDD 19), Anchorage, AK, United States, Aug. 2019
- **Yusan Lin**, Maryam Moosaei, Hao Yang, *Learning Personal Tastes in Choosing Fashion Outfits*, Understanding Subjective Attributes of Data: Focus on Fashion and Subjective Search workshop (CVPR 19), Long Beach, CA, United States, Jun. 2019
- **Yusan Lin**, Peifeng Yin, Wang-Chien Lee, *Modeling Dynamic Market Competition on Crowdfunding*, IW3C2 The Web Conference (WWW 18), Lyon, France, Apr. 2018
- **Yusan Lin**, Peifeng Yin, Wang-Chien Lee, *Modeling Menu Bundle Designs of Crowdfunding Projects*, ACM Conference on Information and Knowledge Management (CIKM 17), Singapore, Nov. 2017
- **Yusan Lin**, Tawei Wang, *Dress Up Like a Stylist? Learning from A User-Generated Fashion Network*, 20th ACM SIGKDD Workshop on Machine Learning Meets Fashion (KDD 17), Halifax, Canada, Aug. 2017
- Jorge Alé Chilet, Cuicui Chen, **Yusan Lin**, *Analyzing Social Media Marketing in the High-End Fashion Industry Using Named Entity Recognition*, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 16), San Francisco, CA, Aug. 2016
- **Yusan Lin**, Chung-Chou H. Chang, Wang-Chien Lee, *Analyzing Social Media Marketing in the High-End Fashion Industry Using Named Entity Recognition*, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 16), San Francisco, CA, Aug. 2016
- **Yusan Lin**, Heng Xu, Yilu Zhou, Wang-Chien Lee, *Styles in the Fashion Social Network: An Analysis on Lookbook.nu*, International Social Computing, Behavioral Modeling and Prediction Conference (SBP15), 2015
- **Yusan Lin**, Yilu Zhou, Heng Xu, *Text-Generated Fashion Influence Model: An Empirical Study on Style.com*, Hawaii International Conference on System Sciences (HICSS 15), Kauai, HI, Jan. 2015
- **Yusan Lin**, Yilu Zhou, Heng Xu, *The Hidden Influence Network in the Fashion Industry*, Workshop on Information Technologies and Systems (WITS 14), Auckland, New Zealand, Nov. 2014

PATENTS

Structured Graph Convolution Networks with Stochastic Masks for Network Embeddings 2021
Reference number: 5508US01

System, Method and Computer Program Product for User Network Activity Anomaly Detection 2020
Reference number: 5156US01

Methods and Systems For Peer Grouping in Insider Threat Detection 2020
Reference number: 4113US01

System, Method, and Computer Program Product for a Set of Items to a User 2019
Reference number: 3689US01

System, Method, and Computer Program Product for Predicting User Preference of Items in an Image 2018
Reference number: 2957US01

AWARDS

Information & Intelligent Systems Research Grant 2017
National Science Foundation, with Wang-Chien Lee (Pennsylvania State University)

University Research Council Competitive Research Grant 2017
Kellstadt Graduate School of Business, DePaul University, with Ta-Wei Wang (DePaul University)

Research Grant 2016
The Institute for Quantitative Social Science (IQSS), Harvard University, with Cuicui Chen (Harvard University), Jorge Alé Chilet (Hebrew University)

Graduate Student Teaching Award 2016
Department of Computer Science and Engineering, Penn State University, one awardee per year

TEACHING EXPERIENCE

Instructor Aug 2015 - Dec 2016
CMPSC431 W Introduction to Database Management Systems
YouTube channel:
https://www.youtube.com/channel/UCjkGzGfgvX_Zd8kxs4ldhFw *University Park, PA*

- Senior-level course with 70 students enrolled on average
- Received 6.7/7 on the students' evaluations
- Awarded with graduate student teaching award

INTERVIEWS AND INVITED TALKS

Application of Artificial Intelligence in the Fashion Industry 2021
Z-Combinator, Taiwan

Artificial Intelligence in Fashion 2018
Keynote, Fashion Technology Week New York, New York

Fashion Meets Data Science 2017
Fashion Technology Week New York, Microsoft Flagship Store, New York

Meet the Fashion Data Analyst Working to Predict the Next Big Trend 2016
Teen Vogue, Issue: December

Measuring the Influence of Fashion Designers 2015
Data Skeptic Podcast, Episode 68

SERVICE

DSAA Research Track, Program Chair 2021

DASFAA Technical Program Committee 2021

DSAA Research Track, Program Chair 2020

KDD AI for Fashion, Program Chair 2019

CIKM Applied Research Track, Program Chair 2019