Yiling Lin

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EDUCATION	PhD -	Information	Science

August 2021 - Present

University of Pittsburgh

 ${f MA}$ - Computational Social Sciences

October 2019 - August 2021

University of Chicago

BA - Management Science in Finance Engineering

Beijing Normal University

September 2014 - July 2018

RESEARCH **EXPERIENCE** Research Assistant

November 2019 - June 2021

Knowledge Lab, University of Chicago, Chicago, IL

NLP Algorithm Researcher Swarma Campus Inc, Beijing, China August 2018 - June 2019

WORKING **PAPERS**

The delayed recognition of scientific novelty Yiling Lin, James Evans, Lingfei Wu

2021

Under review, https://arxiv.org/abs/2103.03398

PROJECTS

Journal Collaborative Filtering Recommendation

 $\mathrm{May}\ 2020$

Finished Paper: Where to submit your next paper? Journal embeddings to optimize impact through diverse outlets, Yiling Lin, Haochuan Cui, Lingfei Wu, James.A.Evans

- Defined the breadth of a scientist's audience group a scientist with pointwise mutual information.
- Discovered a relation between the breadth of a scientist's audience group and the impact of a him/her.
- Implemented collaborative filtering recommendation on the next journal with journal embeddings(trained with Gensim-SGNS) trained on sequence of publication records of scientists, and this recommendation system introduces unexploited and relevant journals to scientists.

Measuring Human Capital in Labor Market: How to be a valuable worker? November 2019 - November 2020

Research Assistant: Quantifying Skill Dependency and Revealing Deskilling, Knowledge Lab, Uchicago (cooperate and work under the supervision of Prof. Lingfei Wu and Prof. James.A.Evans)

- Measured complementarity and substituablity of pairwise skills from demand side based on the distance on co-occurrence association space and context space.
- Cross validated the meaning of complementarity and substituablity based on pointwise mutual information and conditional probability.
- Assisted in extracting and validating a positive correlation between the multiplication of complexity and utility and job salary.

- Identified and measured the institutional buffering and the social burden of workers with the index by controlling the co-founding variables: company recruitment size and working experience of worker.
- Measured two types of skills: cheese and berry, based on network science and explored the boundary of skills(division of labour) along hierarchy structure.

Discourse System Embeddings and Social Identity April 2020 - June 2020 Finished project: Can narratives difference reveal people's class?— A zoom-in to the stories of lower class female laborers in China, Yiling Lin, Chengwei Wang

- Discovered a relatively positive job-value orientation of female laborers.
- Conveyed a difference on discourse system of female laborer and that of mainstream culture which is associated with class by designing experiments to construct discourse system of female laborer based on 2,000 scraped posts.
- Illustrated a twist of interpretation on a set of social imaginary between female laborers and mainstream culture. This set of social imaginary is closely associated with history events.

Disruption of the Pandemic on the Economical Life June 2020 - Present Finished Project: The Impact of COVID-19 on Employment Satisfaction and Expectation Evidence from the Content Analysis of Five Industries on Glassdoor, Xiaofeng Li, **Yiling Lin**

- Discovered a shift on the orientation job of employees from pay-oriented to opportunity-oriented with 20,591 ratings of workers towards 51 companies across 5 fields scraped from Glassdoor.com spanning from September 2018 to June 2020
- Conveyed an increasingly positive job-satisfaction orientation of employees during the pandemic.

TALKS

- 07/2021 Excited to present the work on the delayed recognition of scientific novelty at IC²S², ETH.
- 07/2021 Excited to present the work on the delayed recognition of scientific novelty at the **School of Information Management**, Peking University.
- 06/2021 Excited to present the work on the delayed recognition of scientific novelty at the **Annual Interdisciplinary Graduate Conference**, MAPSS and MACSS, University of Chicago.
- 11/2020 Excited to present the ongoing work of expressive power of concept at a guest lecture at **Department of Communication**, Michigan State University.
- 08/2020 Excited to discuss the dependency network on **Swarma Club-Kaifeng Academic Meeting**.

SKILLS

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Programming Languages: Python (pytorch, numpy, pandas, matplotlib, spaCy, scipy, mpi4py, PyOpenCL, PySpark), Matlab, Sql, Processing.

KNOWLEDGE

Models Application: NLP, Graph Neural Network, Deep Learning, Machine learning.

Social Sciences Theory: Social Network Analysis, Sociology Economics, Labor Study.

Life: Drums, Electronic Keyboard.