

# Yunyu Liu

## EDUCATION

- 09/2020 - now **Purdue University, Indiana, USA**  
*Ph.D., Major: Computer Science*
- 09/2018 - 05/2020 **Northeastern University (NEU), Boston, USA**  
*M.S., Major: Computer Engineering, GPA: 3.78*
- 09/2014 - 07/2018 **Shanghai Jiao Tong University (SJTU), Shanghai, China**  
*B.Eng., Major: Electrical Engineering, GPA: 3.40*  
*Minor: Finance, GPA: 3.57*

## SELECTED PUBLICATIONS

- 01/2022 **Yunyu Liu**, Jianzhu Ma, Pan Li, "Neural Predicting Higher-order Patterns in Temporal Networks," WWW 2022
- 09/2021 Lichen Wang, Bo Zong, **Yunyu Liu**, Can Qin, Wei Cheng, Wenchao Yu, Xuchao Zhang, Haifeng Chen, Yun Fu, "Aspect-based Sentiment Classification via Reinforcement Learning," ICDM 2021
- 01/2021 Yanbang Wang, Yen-Yu Chang, **Yunyu Liu**, Jure Leskovec, Pan Li, "Inductive Representation Learning in Temporal Networks via Causal Anonymous Walks," ICLR 2021
- 07/2020 **Yunyu Liu**, Lichen Wang, Yue Bai, Can Qin, Zhengming Ding, Yun Fu, "Generative View-Correlation Adaptation for Semi-Supervised Multi-View Learning," ECCV 2020
- 08/2019 Lichen Wang, Zhengming Ding, Zhiqiang Tao, **Yunyu Liu**, Yun Fu, "Generative Multi-View Human Action Recognition," ICCV 2019 (Oral)
- 05/2018 **Yunyu Liu**, Zhiyang Xia, Ping Yi, Wei Wang, Yao Yao, Ting Zhu, Tiantian Xie, "GENPass: A General Deep Learning Model for Password Guessing with PCFG Rules and Adversarial Generation," ICC 2018

## WORKING EXPERIENCE

- Shanghai LiveSine Corporation,** **Jul 2016 - Sep 2016**  
Position: Internship, R&D  
Developed a Data Transfer Unit (DTU) with Bluetooth
- Designed and built a DTU chip with Bluetooth and TCP/IP service.
  - Designed a corresponding APP which can communicate with the DTU by Bluetooth and with the server by TCP/IP.

## SCIENTIFIC RESEARCH EXPERIENCE

- Purdue University, GCoM,** **Sep 2020 – now**  
Pattern prediction in the temporal network
- Developed a technique named causal anonymous walk to extract the temporal information efficiently and effectively.
  - Defined the interaction expansion of three nodes (a triplet) in a temporal hypergraph.
  - Designed a model to find what type of, when, and why the interaction happens among a triplet with low computational resource.
- Northeastern University, Synergetic Media Learning Lab,** **Oct 2018 – Aug 2020**  
Semi-supervised Multi-view Learning
- Employed generative models and domain adaptation to the multi-view learning to fully explore multi-view information.
  - Proposed a graph-based method for the label-level fusion.
  - Utilized information entropy to help the fusion.
- Multi-aspect Sentiment Classification (Collaborate with NEC lab)
- Developed a reinforcement learning model to accurately align the task-relevant words with aspects.
  - Developed an end-to-end pipeline for the agents to explore paths from target aspect nodes to their potential sentimental regions based on minimum spanning tree algorithm.