## YUQIAO CHEN

1512 Meadow View Dr. Richardson, TX, 75080 yuqiao.chen@utdallas.edu | www.linkedin.com/in/yuqiaochen

SKILL

Area of Interest: Graphical Models, Reinforcement Learning, Relational Models

Language & Tools: Python, Java, MATLAB, C/C++, C#, Java Script,

PyTorch, OpenCV, Spring MVC, Unity

Industry Knowledge: Machine Learning, Neural Networks, Artificial Intelligence, Web Development

## RESEARCH PROJECTS

- Lifted Hybrid Message Passing Proposed a Generic approximate lifted inference algorithm which can be applied to Markov Random Fields or Relational Models with both discrete and continuous domain. We proposed a particle message approximation and a Coarse-to-Fine lifting approaches. (IJCAI 2019)
- Lifted Hybrid Variational Inference Exploit symmetries from a graph by post-evidence-insertion. The approach is based on Bethe Free Energy approximation with several assumption on the belief distribution. (StaRAI 2020)
- Approximate Convex Linear Piecewise Fitting (CLP) Solve CLP problem approximately by using Convex Envelope and apply it to Reinforcement Learning task with continuous action space. (Currently working)

## **EXPERIENCE**

Verisk Al Innovation Lab, Jersey City, NJ

AI/ML Research Intern

June.2019-Aug.2019

Mobile: (469) 620-1238

Work Authorization: F-1 VISA

• Developing new algorithm for modeling the distribution of tables or forms in documents. It combines the power of Graphical Models (the ability to encode human knowledge / inductive bias) and the power of Neural Networks (expressiveness of learning arbitrary distribution).

Copart, Dallas, TX

Software Engineer Intern

May.2017-Aug.2017

- Designed and developed texting and voice messaging web services with Spring MVC framework from scratch.
- Maintained code for several important web services, including email and user login / logout services.

University of Texas at Dallas, Richardson, TX

Research Assistant May.2018-Present

Doing research relevant to Graphical Models and Reinforcement Learning

Teaching Assistant Aug.2017-May.2018

• Graded assignments and provided additional support to students on classes: Web Programming Languages, Digital Forensics, Advanced Algorithm Design and Analysis.

## **EDUCATION**

University of Texas at Dallas, Richardson, TX

Ph.D. in Computer Science (GPA: 4.0)

M.S. in Computer Science (GPA: 4.0)

Aug.2017-Present

Aug.2016-Aug.2017

Southwest University of Science and Technology, Mianyang, China

B.E. in Telecommunications Engineering (GPA: 3.75)

Sept.2011-July.2015