Xuefei (Fei) LI

University of Minnesota, Twin Cities, Minneapolis, 55455
li001008@umn.edu (612)2321271
https://snowflylxf.github.io/

EDUCATION

College of Science and Engineering, University of Minnesota Twin cities Sep 2018 – now
M.S. in Computer Science, Plan B project-based, GPA: 4.0/4.0

School of Aeronautics and Astronautics, Fudan University Sep 2014 - Jun 2018
B.S. in Theoretical and Applied Mechanics, GPA Ranking: 6/57

School of Computer Science, Fudan University Sep 2016 - Jun 2018
Minor in Data Science, GPA: 3.70/4.0

Major courses: Computer Graphics (A), Visualization (A), Artificial Intelligence (A), Computer Vision (A), Machine Learning (A), Intro to Data Mining (A), Introduction to Database (A), Probability Theory & Mathematical Statistics (A), Digital Signal Processing(A), Mathematical Modeling (A), Partial Differential Equation (A), Advanced Algebra and Analytic Geometry (A-)

RESEARCH INTEREST

Visualization, Vision, Artificial Intelligence, Machine Learning, Computer Graphics, Human-Computer Interaction

RESEARCH EXPERIENCES

Mimic Robot | Plan B project, Advisor: **Prof. Stephen J. Guy**, Applied Motion Lab at UMN Sep 2019 - present

- Achieved pose estimation in 3D from a single video clip using 2D keypoints trajectories detected in each frame
- Data-driven character animation with Reinforcement Learning

Egocentric Cognitive Mapping, Advisor: **Prof. Hyun Soo Park**, UMN Vision Lab Mar 2019 - Dec 2019

- Built a cognitive map from First-Person videos in grocery stores using 3D reconstruction
- Designed a method that transfers from multi-view images to continuous rendering model

Visualization Project, Advisor: **Prof. Daniel Keefe**, Interactive Visualization Lab at UMN Feb 2019 - May 2019

- Presented rendering of Food web structure with various models and a game using simulation to illustrate Energy Pyramid with Bell Museum at St Paul, Minnesota
- Designed a tool that integrates various forms of visualization into one, embedded the visualization information in the video

Unsupervised Featured Learning and Star-Galaxy Classification | Summer Intern Jul 2017 - Sep 2017
Advisor: **Prof. Robert J. Brunner**, Laboratory for Computation, Data, Machine Learning, University of Illinois at Urbana-Champaign

- Implemented ConvNets for feature learning on Sloan Digital Sky Survey dataset images
- Designed a generative model with Variational Autoencoder, Manifold learning, Clustering and Search to segment the objects

ACTIVITIES AND AWARDS

Shanghai Outstanding Graduate Awards Jun 2018
Scholarship for Outstanding Students (FDU)，Second Prize 2017/2016/2015
Student Union, School of Aeronautics and Astronautics, FDU | Outstanding Director Award 2015 - 2016
Volunteer team, Yinhang Residential District Community, Shanghai | Project Leader Jul 2015
Youth League Committee, Department of the Youth Volunteer Activities, FDU | Outstanding Director Award 2014 - 2015

PROFESSIONAL EXPERIENCES

HP Inc. Internship as Computer Vision Engineer, Shanghai, China Apr 2018 - Jul 2018

- Use deep learning to compress images, and also decompress to preserve good quality.

iQiyi.com Inc. Internship as Algorithms Engineer, Shanghai, China Jan 2018 - Feb 2018

- Designed the learning Question Answering over QA Corpora and Knowledge Bases developed
- Developed Nature Language Understanding model for intent detection with tensorflow to build a chatbot

SKILLS

- **Computer/Technical skills:**
  C/C++, OpenGL, Python, MATLAB, Processing, JavaScript, Unity, AutoCAD, MySQL, Photoshop
- **Interest:**
  Piano (Level-9 certificated with Chinese Musicians Association), Hiking, drawing