







Yi(Chelsy) WEN

 w-yi  wyi  <https://w-yi.github.io>  wyi@stanford.edu  (734)882-7062  Stanford, CA · 94305

SUMMARY

- Seeking for Internship Summer 2020
- Well-organized and self-motivated engineer, nice group worker with leadership, fast learner and good contributor
- Proficient in `Python`, `C/C++`; Familiar with `Java`, `Hadoop`, `SQL`, `JavaScript`, `MATLAB`, `R`, `html5`, `CSS`, `Linux`, `Windows`, `LaTeX`.

EDUCATION

Stanford University

Expect: Sept. 2019 – March 2021

M.S. in Computer Science

- Courses (taking): Programming Languages, Data Management and Data Systems

University of Michigan, Ann Arbor (UM)

Sept. 2017 – May 2019

B.S.E. in Computer Science | Mathematics Minor

GPA: 4.0/4.0

- Courses: Machine Learning, Deep Learning, Data Mining, Computer Vision, Web Systems, Computer Organization

Shanghai Jiao Tong University (SJTU)

Sept. 2015 – Aug. 2019

B.S.E. in Electrical and Computer Engineering

- Courses: Bayesian Analysis, Probability & Statistics, Discrete Math, Honors Math, Data Structures & Algorithms

RESEARCH EXPERIENCE

Stanford Vision & Learning Lab

Stanford, CA

Research Assistant | Lab directed by Fei-Fei Li, Juan Carlos Niebles, and Silvio Savarese, Dept of CS, Stanford

Oct. 2019 – Present

- Work on temporal action detection in video

Segmentation Using Voronoi Diagrams

Ann Arbor, MI

Research Assistant | Research led by Selim Esedoglu, Dept of Math, UM

Jan. – April 2019

- Focused on computer vision in mathematics; Solved microscope polycrystalline image segmentation in material science
- Formulated the gradient calculation in MATLAB code

Graph Exploration & Mining at Scale Lab

Ann Arbor, MI

Research Assistant | Lab directed by Danai Koutra, Dept of CS&E, UM

Nov. 2018 – April 2019

- Mined email logging files provided by Trove, Inc.; Learned user behavior by exploring multi-graphs of temporal networks
- Wrote the program in both C++ and Python to quantize social influence with users' node embedding

Michigan Vision & Learning Lab (now Princeton Vision & Learning Lab)

Ann Arbor, MI

Research Assistant | Lab directed by Jia Deng, (formerly) Dept of CS&E, UM

June – Sept. 2018

- Optimized a neural network layer design called "Decorrelated Batch Normalization (DBN)" (2018)
- Translated codes from Lua to Python; Implemented a PyTorch interface; Conducted dozens of comparing experiments
- Focused on speed improve, using numerical analysis for SVD, C++ extension, and multi-GPU synchronization

PROJECT EXPERIENCE

Profile Extraction of Tire 2D Section Images (Sponsored by Giti Tire Corp.)

Shanghai, China

Full-Stack Developer

May – Aug. 2019

- Cooperated with 4 students mentored by staff to deliver DXF files of tires' section contours from 2D scanning
- Proposed a solution based on GrabCut to balance accuracy, robustness and efficiency; Built GUI with TkInter

DiagNet: Bridging Text and Image

Ann Arbor, MI

Team Leader & Machine Learning Engineer

Feb. – April 2019

- Built a team of 5 people curious of Visual Question Answering to propose a model for both VQA (2017) and TextVQA (2019)
- Created a deep learning model in PyTorch with three branches for images, characters in images, questions; Applied self- and co-attention mechanism; Proposed an innovative training strategy to combine evidences in a hybrid fusion

Convison: Bring Vision through Conversation (Supported by Clinc, Inc.)

Ann Arbor, MI

Team Leader & Backend Developer

Jan. – April 2019

- Led a 7-student team, in pursuit of AI for social good, to make a virtual assistant helping the low-vision community
- Determined the project scope; Built the data pipeline in Python to deal with CV and NLP tasks

Staircases Cleaning Robot

Shanghai, China

Inventor & Programmer

July – Dec. 2016

- Worked in a multidisciplinary team to devise a robot capable of moving, climbing, and cleaning
- Patents: CN206342425U, CN106175608B

TUTORING EXPERIENCE

Teaching Assistant for VE 401 (SJTU) - Probabilistic Methods in Eng., instructed by Horst Hohberger

Summer 2019

Instructional Aide for EECS 442 (UM) - Computer Vision, instructed by David Fouhey

Winter 2019

Instructional Aide for EECS 445 (UM) - Intro. to Machine Learning, instructed by Jenna Wiens

Fall 2018

Grader for EECS 370 (UM) – Intro. to Computer Organization

Winter 2018