

ZHENBANG WU

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EDUCATION

Zhejiang University

Haining, CN

Bachelor of Engineering in Electronics and Computer Engineering

Sept. 2016 to June 2020

GPA: 3.93/4.0 (Total Enrolled Units: 68)

University of Illinois at Urbana-Champaign

Urbana, US

Bachelor of Science in Computer Engineering

Aug. 2016 to May 2020

GPA: 3.94/4.0 (Total Enrolled Units: 61)

University of California, Los Angeles

Los Angeles, US

Cross-disciplinary Scholars in Science and Technology (CSST) Program

June to Sept., 2019

GPA: 4.0/4.0 (Total Enrolled Units: 12)

Highlighted Courses: Intro. to Data Mining (A), Applied Machine Learning (A), Applied Parallel Programming (A), Computer Systems Engineering (A+), Probability (A), Algorithms (A), Data Structures (A+), Computer Systems & Programming (A+), Digital Systems Laboratory (A).

RESEARCH EXPERIENCES

Research Assistant, University of California, Los Angeles

June to Sept., 2019

Advisor: [Prof. Yizhou Sun](#)

Learning to Transfer via Modeling Multi-level Task Dependency

- Constructed attention based tasks dependency relationships in general level and data-specific level;
- Utilized the learned tasks dependency relationship to guide what knowledge should be transferred;
- Outperformed SOTA multi-task learning methods on structured data (graph and text);
- Received UCLA-CSST Outstanding Research and Presentation Skills Award (Top 10%).

Image Processing Algorithm Intern, Leadrive Technology (Shanghai)

June to Aug., 2018

Mentor: [Dr. Laiye Bi](#) and [Dr. Longtao Yuan](#)

Development of AI Front-view Advanced Driver Assistance System (ADAS)

- Independently designed an image post-processing system, which integrated distortion correction, (inverse) perspective mapping, position detection, speed measurement, etc;
- Independently designed a camera calibration system based on Optical Flow and Newton's Method;
- Improved the accuracy and efficiency of online camera calibration compared to existing methods.

Research Assistant, ZJU-UIUC Institute

May 2018 to May 2019

Advisor: [Prof. Chushan Li](#)

Development of Smart Power Outlet for Plug-in Electric Vehicles

- Realized functionalities such as charging measurement, circuit breaker, cloud communication, etc.;
- Utilized Internet of Things (IoT) module to collect real user data for analysis.

SELECTED COURSE PROJECTS

ECE408 Applied Parallel Computing, Final Project

Spring 2019

ZJU-UIUC Institute

Haining, CN

GPU Accelerated Mitosis Cell Detection

Advisor: [Prof. Steven Lumetta](#)

- Utilized SOTA Convolutional Neural Network (CNN) to detect mitosis cell;

- Optimized the CUDA implementation of CNN with novel fast matrix multiplication algorithm;
- Accelerated the forward propagation of CNN by 181% compared to existing CUDA implementation.

ECE391 Computer Systems Engineering, Design Competition

Fall 2018

University of Illinois at Urbana-Champaign

Urbana, US

Linux System Design

Advisor: [Prof. Zbigniew Kalbarczyk](#) and [Prof. Jian Huang](#)

- Developed the core of an operating system from scratch;
- Realized several basic functionalities such as system calls, scheduling, file system etc.;
- Added several advanced functionalities such as graphical terminal, Chinese Pinyin input method editor, drivers (sound, mouse, tux), ACPI power-off and reboot, and CMOS date time;
- Ranked No. 1 among 54 groups in the design competition.

PUBLICATIONS & PRESENTATIONS

1. Haonan Wang^{*}, **Zhenbang Wu^{*}**, Ziniu Hu, Yizhou Sun, “*Learning to Transfer via Modeling Multi-level Task Dependency*”, **unpublished**, under review at The Eighth International Conference on Learning Representations (**ICLR’20**).
2. “*Chemical Property Prediction via Graph Knowledge Transfer*”, Invited Presentation at UCLA-CSST Final Presentation, Los Angeles, US, Sept. 2019.

** indicates equal contribution.*

TEACHING EXPERIENCES

Teaching Assistant, ECE220 Computer Systems & Programming, ZJU-UIUC Institute *Fall 2019*

Instructor: Prof. Zicheng Liao

Teaching Assistant, CS225 Data Structure, ZJU-UIUC Institute *Spring 2019*

Instructor: Prof. Volodymyr Kindratenko

SELECTED HONORS & AWARDS

- **National Scholarship** (Top 2%), Ministry of Education of the P.R. China, *2019*
- **Zhejiang University Scholarship - First Prize** (Top 3%), ZJU, *2019*
- **CSST Outstanding Research and Presentation Skills Award** (Top 10%), UCLA, *2019*
- **CSST Scholarship** (USD \$5,343), UCLA, *2019*
- **Dean’s List**, UIUC, *2019*
- **Outstanding Student Award**, ZJU, *2017 & 2018 & 2019*
- **Zhejiang University Scholarship - Second Prize** (Top 8%), ZJU, *2018*
- **Second-Class Academic Excellence Scholarship**, ZJU-UIUC Institute, *2018*
- **First Place** in ECE391 Computer Systems Engineering Design Competition (1/54), UIUC, *2018*
- **Zhejiang University Scholarship - Third Prize**, ZJU, *2017*
- **First-Class Academic Excellence Scholarship**, ZJU-UIUC Institute, *2017*

TEAMWORK EXPERIENCES

President of Student Union of Intl. Campus, Zhejiang University *May 2017 to May 2019*

Teaching Volunteer in Rural China *June 2017*

Volunteer at 120th Anniversary of Zhejiang University *May 2017*

STANDARD TEST

TOEFL: 109 (Reading: 29, Listening: 30, Speaking: 25, Writing: 25)

GRE: 329 (V159 + Q170) + 3.5(AW)