

EDUCATION

Bachelor of Computer Science and Applied Mathematics, UC Davis (2015-2019)

GPA 3.60

Ph.D. of Computer Science, UC Davis (expected 2020-2025)

Machine Learning

COURSEWORK

Computer Science: Algorithm Design, Artificial Intelligence, Computer Architecture, Computer Vision, Machine Learning, Natural Language Processing, Operation Systems, Programming Languages, Scientific Computation, Web Programming

Mathematics: Analytical Number Theory, Applied Linear Algebra, Complex Analysis, Modern Algebra, Numerical Analysis, Optimization, Ordinary Differential Equation, Probability, Real Analysis

SKILLS

Expert: C/C++, Python, MATLAB, SLURM, GitHub

Adequate: Java, x86 assembly, JavaScript, CSS, HTML, Lisp, Prolog, TensorFlow, Scikit-learn

Environment: Linux, Ubuntu, MacOS, Windows

Language: English, Chinese, Japanese

HIGHLIGHTED RESEARCH EXPERIENCE

Automated Compendium Construction (09/2019-Present)

UC Davis Genome Center

- Implemented metadata pipelines to automate the process of extracting and integrating omics experiment metadata from various databases.
- Implemented pipelines to retrieve experiment accessions and reference genome data for specified organisms.

NIH Superfund Research Program (03/2020-Present)

UC Davis Superfund Research Center

UC Davis Genome Center

- Integrating bioassay and toxicology data in order to establish a data management platform.
- Standardizing the format of data to facilitate the use of machine learning.

OTHER RESEARCH EXPERIENCE

MissForest Parallelization for SLURM (10/2018-09/2019)

UC Davis Genome Center

- Implemented Python version of missForest package and developed a novel parallel architecture for the package to run efficiently on SLURM HPC.

Depression Predictor Project (10/2019-02/2020)

UC Davis Genome Center

UC Davis Department of Psychology

- Modelling a machine learning predictor for depression based on linear regression, random forest, etc.
- Feature selecting the best predictors for depression.

Animal-Cell-Based Meat Project (05/2020-Present)

UC Davis Department of Food Science and Technology

UC Davis Genome Center

- Building ACBM price model in Python
- Running model sensitivity analysis using SALib and visualizing the outcome of the analysis

WORK EXPERIENCE

Junior Specialist (Fall 2019-Present)

UC Davis Genome Center

- **Participating in several researches listed above.**
- **Implementing pipelines and machine learning models.**

Undergraduate Research Assistant (Fall 2018-Fall 2019)

UC Davis Genome Center

- **Worked as a trainee under the supervision of Dr. Ilias Tagkopoulos.**
- **Developed software and pipelines for studying transcriptomics and genomics using machine learning and software engineering skills.**

Front-end Engineer (Fall 2017)

UC Davis International Center

- Developed and designed the front-end of faculty information service website by JavaScript, HTML, and CSS

Software Engineer Intern (Summer 2016)

Shanghai Dimue Technology Ltd. Co.

- Helped program the application to have the multi-language functionality.
- Developed a tool program in C++ to translate Chinese keywords into other languages.
- Translated the conference materials and documents in Chinese to English for international partners.

ACTIVITIES

Member, Japanese American Student Society, September 2016-June 2017

Member, StarCraft 2 AI Team, April 2018-July 2018

HONORS

Luther and Marie Davis Scholarship

College of Agriculture and Environmental Sciences Dean's Honors List

College of Letters and Science Dean's Honors List