

HANGXIAO ZHU

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OBJECTIVE

An entry-level software engineer internship to make the most of my abilities.

EDUCATION

The Ohio State University

09/2019 - 05/2022

- Bachelor of Science in Computer Science & Engineering
- Graduated with Latin honor: Magna Cum Laude
- GPA: 3.85

Washington University in St. Louis

08/2022 - Present

- Master of Science in Computer Science

RESEARCH & INTERNSHIP

A study on Interpretable Deep Neural Networks for City Visual Perception Analysis Time

Position: Research Volunteer

07/2020 - 09/2020

- Research Profile: The research is sponsored by The National Natural Science Foundation of China and the Director Foundation Project of National Engineering Laboratory for Public Safety Risk Perception and Control by the Big Data.
- Interned in the research hosted by Prof. Keyang Cheng at Jiangsu University while studying remotely at OSU during the Covid-19 US travelling-ban in 2020.
- Assisted in improving deep learning models by understanding metric features, classification, and prediction to enhance the interpretability of deep neural networks.
- Assisted in calibrating machine learning results and upgrading machine learning models as data is added and updated.
- Learned about Laplace Pyramid, Spearman Correlation Analysis, Generative Adversarial Networks and other machine learning related knowledge.
- Gained more experiences about research procedures, including designing the algorithm and configuring the data set to validate the algorithm, designing proper data generators, etc.

HP Tech Ventures

Position: Corporate Venture Capital and Business Analyst

01/2021 - 03/2021

- In recognition to source startup information and data for potential investment as well as determine which startups HP should pursue a meeting with.
- Collected startup data, used data cleaning methods and tools to calculate and analyze data, then reported and recommended promising startups for further investment due diligence.
- Tools used: Crunchbase, OpenRefine, Excel, SQL

The Ohio State University - Bioinformatics and Mathematical Biosciences Lab

Position: Research Volunteer

06/2022 - Present

- Assisted in testing ssRead database.
- Participate in weekly group meetings and research discussions on Alzheimer's disease.

- Learned how to use R to analyze data, and learned a lot of basic knowledge of bioinformatics, genetics, and other related subjects.
- Lab website: <https://u.osu.edu/bmbl/>

PROJECT & COURSEWORK

A Monogame Remake of The Legend of Zelda

01/2021 - 04/2021

- Worked in a 5-people group to develop and refine the 2D game application A Monogame Remake of The Legend of Zelda in course CSE 3902.
- Responsible for designing the map of the game and the operation instructions in the project.
- Used tech stack: C#, JSON, .NET.
- Repository: https://github.com/FlyPig23/LoZ_CSE3902

Fictitious Company Database Setup

05/2021 - 07/2021

- Worked in a 3-people group to set up a database for a fictitious company in course CSE 3241.
- Formulated a detailed description of the DB design and functions, relational database architecture, entity relationship diagrams, SQL code, data, and other DB components.
- Used tech stack: SQL.

“Core Language”

08/2021 - 12/2021

- Designed a new simple imperative programming language “Core Language” based on Java.
- This project conducted in the course CSE 3341 can take “Core language” text file as input and parse them into runnable instructions.
- Used tech stack: Java.
- Repository: <https://github.com/FlyPig23/CSE3341>

Neural Network & Machine Learning Projects

01/2022 - 04/2022

- Project 1: Implemented a two-layer perceptron with the backpropagation algorithm.
- Project 2: Implemented a Radio Basis Functions network for one input variable, one output variable and Gaussian basis functions.
- Project 3: Trained a Restricted Boltzmann Machine to learn a collaborative filter.
- Project 4: Explored how different convolutional neural network structures result in differences in performance on the Fashion-MNIST dataset.
- Project 5: Implemented and test the Stochastic Gradient Descent algorithm for logistic regression in different scenarios.
- Repository for Project 1 - 4: <https://github.com/FlyPig23/CSE5526>
- Repository for Project 5: <https://github.com/FlyPig23/Machine-Learning>

COMPETITION

The 4th China College Students’ “Internet+”

Innovation and Entrepreneurship competition

02/2018 - 06/2018

- Won the prize of college-level Silver Award.
- Worked as the team leader in the project "Standardization and Application of Ecological Farm Products based on Shuangma Ecological Farm".
- Responsible for designing a basic web page to display the agricultural products and other related sales information.
- Used tech stack: HTML5, CSS, and JavaScript

The Ohio State University 2019 Hack OHI/O**09/2021**

- Our group designed a software to help students select the club with the right time for the students who want to join the club.
- Used Web Crawler to crawl data, including time and location of OSU club activities, from the Student Organization Website of OSU
- Made use of Azure Machine Learning to design a machine learning model to recognize time and dates in various formats.
- Used tech stack: Python, Azure

The Ohio State University 2021 Hack OHI/O**11/2021**

- Our group challenged the problem raised by the Veeva Systems company: Build a web app that can take prescriber data for doctors to build out trending and targeting reports.
- Attempted to build an ideal predict model to predict future trends in medicine with several methods, including Linear Regression, K—Means, and Decision Tree.
- Used tech stack: Python, Streamlit
- Repository: <https://github.com/FlyPig23/VeevaSystem>

SKILLS**Language**

Java, Python, HTML, CSS, JavaScript, Swift, R

Database

MySQL