Yixuan Ye

LinkedIn: yixuan-ye-4883391b4

Github: github.com/Harold-y

Email: yixuan_ye@outlook.com

Mobile: +1 (608) 509-1604

EDUCATION

University of Wisconsin - Madison — Madison, WI
Bachelor of Science - Computer Science; GPA: 4.00 — *Sep 2020 - Dec 2023*

Bachelor of Science - Data Science; GPA: 4.00

Courses: *Discrete Math, Data Structures, Algorithms, Linear Algebra, Calculus, Machine Organization, Operating System, Artificial Intelligence, Data Programming, Statistical Modeling, Parametric and Nonparametric statistics, Java Programming, Computer Networks, Databases, Information Security*

SKILLS SUMMARY

- **Languages**: Java, Python, R, JavaScript, Typescript, C, SQL, HTML, CSS, Go
- **Frameworks**: Spring Boot, Spring Cloud, Tidyverse, Numpy, Pandas, PyTorch, React, Vue, JQuery, Gin, Three.js
- **Tools**: Redis, Docker, MySQL, SQLite, PostgreSQL, Git, Nginx, Jenkins, Linux, Maven, Mybatis, Vault, Node.js
- **Soft Skills**: Leadership, Communication, Team Working, Task Scheduling & Management

WORK EXPERIENCE

Dell Technologies. — Hopkinton, MA
Software Engineer I (Full-time) — *Feb 2024*

- **Trident Argonauts Team**: Work as a full time software engineer

Dell Technologies. — Round Rock, Texas
Software Engineer Intern at ISG (Full-time) — *May 2023 - Aug 2023*

- **Green QoS on Storage**: Built a model to predict IOPS on the storage device for power saving
- **Data Cleaning**: Used PostgreSQL as the DB and performed data cleaning
- **Model Construction**: Implemented the LSTM and Informer model for predicting the time series data
- **Policy and Visualization**: Built policy for each PowerMax customer and enabled policy visualizations
- **Impact**: Developed GreenQoS that helps Dell to achieve net zero, reduce 2.5K CO2 emissions each year, save on average 2800 Kwh power for each system per year.

Dell Technologies. — Round Rock, Texas
Software Engineer Intern at Apex Engineering (Full-time) — *June 2022 - Aug 2022*

- **Automation of Service Account Rotation**: Built an automation program to reduce the steps and time costs for service account rotation
- **REST API & Python**: Used Python to make API calls and make computation based on Data
- **SDL**: Interact with HashiCorp Vault and other app safes to automate the management of secrets
- **CI/CD**: Utilized Jenkins as the CI/CD Pipeline to achieve the automation process
- **Impact**: Decreased the efforts to rotate the service accounts

Shibing Technologies. — Remote
Full-stack Developer; Manager (Part-time) — *Jul 2020 - Apr 2021*

- **College Information System**: Implemented an college information system for Chinese students
- **Data Process**: Extract and process data from JSON using Python and put data into App's database
- **Full-Stack Development**: Developed the database, backend, frontend, and data visualization parts of the project using MySQL, Spring, Vue, and Echarts.
- **Manage & Communication**: Collaborated with finance branch members and prepare demo for potential investors.
- **Impact**: Developed an college information web application which benefits many high school students in China.

RESEARCH EXPERIENCE

Carla Undergraduate Researcher — Remote
Researcher — *Fall 2022*
UW-Madison, Sensing group

- Transferred the KITTI dataset format to COCO style
- Conducted a transfer learning using pre-trained DETR model with KITTI dataset
- Implemented the object detection with DETR on new weights into the CARLA simulator
- Discussed findings and potential future applications with other researchers, professors, and peers.

Ecology Analysis on Species Interaction — Remote
Researcher — *Spring 2019*
Advisor: Dr. David Shanafelt

- Performed a statistical analysis on species interactions across space and climate
- Conducted literature review on the related topic
- Analyzed global host-parasitoid data (from Galiana) using R
- Presented findings in a research report

Projects

○
Photoly - Photo Host & Share Application
May 2022 - Feb 2024
- ○ **Backend & Frontend**: Implemented MySQL & Redis databases, Spring Boot REST API backend, Vue3 + NaiveUI frontend
- ○ **CI/CD & Deploy**: Created a Jenkins Pipeline for CI/CD and deploy the application on cloud Service
- ○ **Containerize**: Created a series of Dockerfiles and enable the docker-compose to build the project with one command
- ○ **Photo Detail**: Users are able to share the photo/video, see EXIF info, GPS location map, add to album/tag, etc.

○
Chinese Poetry Collection - Database of Chinese Poetry/Web APP
Sep 2023 - Dec 2023
- ○ **Database**: Transfer messy JSON files to a unified MySQL database, using Python for data cleaning and database operations.
- ○ **Backend**: Utilized Flask backend framework using Python.
- ○ **Frontend**: Programmed using Vue 3 + Naive UI, deployed on an Oracle cloud instance, and used NginX as a reverse proxy.
- ○ **Impact**: Collected over 25 Stars at GitHub and was merged into the showcase section of the original repository (with 45.8k stars)

○
ShareME - File/URL/Note Sharing APP
May 2023 - June 2023
- ○ **Backend**: Built LevelDB database, used GoLang and Gin as backend.
- ○ **Frontend**: Utilized Vue3 + Vite + Naive UI and aesthetic self design.
- ○ **Deploy**: Deployed the APP to Oracle Instance and set up Nginx Reverse Proxy and domain service.
- ○ **Impact**: Reached a total of 60 Users and Questions

○
EchoQ - Anonymous Question Box
May 2022 - July 2022
- ○ **Backend**: Built MySQL & Redis databases, Spring Boot backend, and token authorization functionalities
- ○ **Deploy**: Deployed the APP to Oracle Instance and set up Nginx Reverse Proxy & Load Balancer
- ○ **Impact**: Reached a total of 60 Users and Questions

○
Laptop Selling Prediction
Apr 2021
- ○ **Summary**: Constructed ML model for predicting users' actions using browsing data
- ○ **Methods**: Implemented a classification model using scikit-learn Pipeline with polynomial features and standard scaler. Used Pandas to preprocess data
- ○ **Impact**: Achieved 93.34% accuracy on the test set

○
CBR Market Platform
Dec 2021
- ○ **Summary**: CBR Market is an online e-commerce platform
- ○ **Backend**: Built MySQL databases, Spring Boot backend, and utilized Sa-Token for authentication
- ○ **Frontend**: Constructed an web application using React.js + Material UI

Certificates

- ○ **Neural Networks and Deep Learning - Coursera**: CMAFWPAM996C
- ○ **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization - Coursera**: YLMT5ECC8UPA
- ○ **Convolutional Neural Networks - Coursera**: ZLTATTZPW257
- ○ **Structuring Machine Learning Projects - Coursera**: DVNP5ZYW9LWN
- ○ **Build Basic Generative Adversarial Networks (GANs) - Coursera**: EZVVXRTJUF2J
- ○ **Build Better Generative Adversarial Networks (GANs) - Coursera**: U8FR36TQLSFX

Honors and Awards

- ○ **Dean's List - UW-Madison**: Sep, 2020 to Dec, 2023
- ○ **Graduated with Distinction - UW-Madison**: Dec, 2023
- ○ **Distinction in the Major - UW-Madison**: Dec, 2023