

Yiyao Zhang

🌐 yiaozzz.github.io/portfolio | [in //yiaozzzhang](https://www.linkedin.com/company/yiaozzzhang) | [G //yiaozzz](https://www.github.com/yiaozzz)

☎ (+1) 614-556-1136
✉ yiaozzyy@gmail.com
📍 Columbus, Ohio

- **Data Engineering:** Python, SQL, SparkSQL, AWS, Tableau, Spark, ETL, Hadoop, Hive, Git, PL/SQL, Oracle DB, MongoDB
- **Development:** Linux, Java, JavaScript, Jupyter Lab, MATLAB, Agile, Docker, Jira, Typescript, React.js, OpenCV, ROS2
- **Courses:** Databases, Probability for Data Analytics, Mathematical Statistics, Data Structures and Algorithms, Linear Algebra, Differential Equations, Software Development and Design, Computer Architecture, Digital Logic

Experience

Oracle Corporation

United States

Configuration Analyst Intern – *New Product & Release Team*

May 2023 – Sep. 2023

- Developed a **SQL**-based data integration system by synthesizing information from four distinct systems onto a **Jira** dashboard, enhancing data interpretability and supporting strategic decision-making
- Engineered a **Python** automation tool to process and analyze complex datasets, boosting efficiency by 25% and reducing manual error rate by 60%
- Contributed to the data integration for the **Oracle CPQ** database, achieving a 30% improvement in repository consistency and bolstering data integrity across over 10,000 companies
- Collaborated with cross-functional engineering and business teams to optimize data exchange processes, resulting in a 15% increase in workflow efficiency
- Streamlined data consolidation efforts across multiple repositories via **Confluence**, resulting in a 40% improvement in data integration and consistency

Alibaba Cloud

China

Operation and Maintenance Assistant Engineering – *Fault Emergency Response Team*

Jan. 2021 – Jul. 2021

- Developed a web-based **JavaScript** fault management web platform to quickly restore operations during critical cloud service outages, enhancing user stability and boosting service reliability by 30%
- Enhanced **SQL**-based data management, increasing data retrieval speeds by 20% and upholding cloud service stability to bolster client trust
- Analyzed fault data to improve emergency response efficiency by 15% and created a **Python**-powered visualization dashboard, which was integrated into the data reporting system, enhancing the clarity of operational insights by 25%
- Led cross-functional teams to align projects with business goal, facilitating fault management retrospectives, continuous improvement cycles, and delivering a 10% increase in project satisfaction rates

EDUCATION

The Ohio State University

Columbus, OH

- Bachelor of Science in Mathematics, and Minor in Computer Science

Graduate Dec. 2023

Extracurricular & Leadership

Bio-Hackathon – First Place

AmplifyBio, The Ohio State University, 2023

- Developed a hardware and software solution for Concussion injury management, enabling clinicians to collect and transmit medical data. This reduced errors in patient handoffs by 60% and streamlined the sharing of SCAT6 evaluations
- Led software application development that enhanced medical data gathering and transfer efficiency by 90%

NeuroTechnology Team – Brain-Computer Interface (BCI) Project

The Ohio State University, 2023

- Developed non-invasive Brain-Computer Interface using **Python** and **Welch's method** for signal processing, and used **Keras**-based convolutional neural network (**CNN**), which advanced communication method for paralyzed patients
- Processed electroencephalogram (EEG) data by applying Independent Component Analysis in **MATLAB** and refined datasets with band-pass filtering using Python, producing clean datasets essential for reliable BCI phoneme recognition

Underwater Robotics Team – Software Development

The Ohio State University, 2023

- Contributed to computer vision for underwater robotics by integrating **OpenCV** and **YOLO** for object detection, coupled with **ROS2** to streamline system communication and enhance navigational functions
- Enhanced object detection accuracy by 20% by employing rotation-invariant and multi-scale template matching with OpenCV, and systematically improved algorithmic efficiency through performance testing

Cantonese Club – Vice President

The Ohio State University, 2021-2023

- Led a team of 40 to execute large-scale cultural events and language workshops, boosting community participation; adeptly negotiated sponsorships with local businesses, enhanced event offerings and reinforced community relationships