Yiyao Zhang

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Columbus, Ohio

- **Technical Skills**: Python, SQL, Java, C, JavaScript, R, Spark, Hadoop, ETL, AWS, Tableau, Statistical Model, Machine Learning, Deep Learning, Generative AI, Large Language Models, Natural Language Processing, Computer Vision, MATLAB, MongoDB, React.js, Linux, Docker, Git, Jupyter Lab, Agile development, Jira, YOLO, ROS2
- **Packages**: TensorFlow, PyTorch, Matplotlib, Pandas, Numpy, Matplotlib, GGPlot, Scipy, dplyr
- **Related Course:** Database System, Probability for Data Analytics, Algorithms, Mathematical Statistics, Linear Algebra, Differential Equations, Data Structures, Software Development and Design, Computer Architecture, Digital Logic

Experience

Oracle Corporation   United States
Configuration Analyst Intern – *New Product & Release Team*   *May 2023 – September 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%
- Drove data integration and consolidation for the **Oracle CPQ** database, achieving a 40% rise in system consistency and bolstering data integrity, impacting over 10,000 companies and enhancing cross-repository data workflows via **Confluence**
- Increased cross-functional team workflow efficiency by 25%, as measured by reduced process cycle times, by spearheading a data exchange optimization initiative across engineering and business units

Alibaba Cloud   China
Operation and Maintenance Assistant Engineering – *Fault Emergency Response Team*   *January 2021 – July 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%
- Optimized **SQL**-based data management systems, enhancing data retrieval speeds by 20% and strengthening cloud service reliability, thereby reinforcing client confidence
- 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 in alignment with business objectives, contributed to fault retrospectives, and achieved a 10% increase in project satisfaction rates; partnered with customer service to solicit feedback for operational enhancements

EDUCATION

The Ohio State University   Columbus, OH
- Bachelor of Science in Mathematics, and Minor in Computer Science – *Dean's list*   ***Graduate Dec. 2023***

Extracurricular & Leadership

Bio-Hackathon – First Place   AmplifyBio, The Ohio State University, 2023
- Directed a multidisciplinary team to win the Bio-Hackathon by managing project logistics from conceptualization to execution, ensuring resource allocation and timely delivery within strict deadlines
- Engineered an integrated hardware and software solution for concussion management, which cut patient handoff errors by 60% and boosted medical data transfer efficiency by 90%, significantly optimizing SCAT6 evaluation processes

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