

JOSHUA MASTERS

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SUMMARY

Recent Computer Science graduate seeking a challenging software development role where I can apply my skills in problem-solving and collaboration to build innovative solutions. Proven experience in full-stack development, machine learning, and Agile methodologies.

EDUCATION

Bachelor of Science

Minor in Music • University of Dayton • Dayton, OH • 2024 • GPA 3.57 of 4.0

• Concentration: Artificial Intelligence/Data Science

SKILLS

Java, JavaScript, HTML/CSS, C++, Python, SQL

React, Express.js, Socket.IO, Node.js, MongoDB

Git, GitHub, Docker, Heroku, PlantUML

Markdown, SSMS (SQL), Kafka, APIs, Spring

Agile, Scrum, Jira, Microservices, Machine Learning, Data Science, Artificial Intelligence

PROJECTS

Financial Exchange Application

Dr. Nicholas Stiffler (Capstone 2) • [ud-cps491-24s-team.github.io/Team02-FinancialExchange-Public/](https://github.com/ud-cps491-24s-team/Team02-FinancialExchange-Public/) • January 2024 - April 2024

- Collaboratively developed an event-driven, microservice-based financial exchange application, ensuring reliable client transactions and supporting **market open and close cycles with minimal downtime**.
- Leveraged React for a dynamic frontend and Spring Boot for a robust backend.
- Integrated Kafka for real-time data streaming and MongoDB for persistent storage.
- Containerized services with Docker for streamlined deployment.
- **Engaged in weekly Scrum meetings, bi-weekly sub-team meetings, and Sprint Retrospectives to drive continuous improvement and project success.**

Messenger Application

Dr. Nicholas Stiffler (Capstone 1) • horizon-messenger-00d0292d47c0.herokuapp.com/ • September 2023 - December 2023

- Collaboratively designed and developed a real-time peer-to-peer (P2P) messenger application, enabling seamless communication.
- Built a scalable, real-time messaging backend using Node.js, Express, and Socket.IO, with MongoDB for data storage and Heroku for deployment.
- **Successfully tested the application with dozens of simulated users, ensuring real-time message delivery and a smooth user experience.**
- Employed Agile/Scrum methodologies and Git for collaborative development.
- **Conducted weekly Sprint planning and Retrospective meetings using Jira for effective task tracking and progress monitoring.**

Detecting Fake News with ML

Dr. Bayley King (Data Science) • github.com/mastersj5/fake-news-detection • January 2023 - May 2023

- Developed a fake news classifier achieving 70% accuracy, utilizing a TensorFlow neural network model and NLP techniques.
- Preprocessed and analyzed a Kaggle dataset of news articles, employing techniques like tokenization, lemmatization, and stop word removal.
- Leveraged TensorFlow Hub's pre-trained word embeddings for efficient text representation.
- Evaluated model performance with metrics like accuracy, precision, recall, and F1-score, and identified areas for improvement using a confusion matrix.

EXPERIENCE

College Intern

Ohio Department of Transportation

July 2023 - August 2024, Columbus, OH

- **Resolved over 200 user inquiries**, providing efficient technical support and troubleshooting for the Civil Rights & Labor Construction Contracting System.
- Improved data accessibility for decision-making by leveraging SQL Server Management Studio to query and extract data from large databases.
- Enhanced system documentation, ensuring accuracy and clarity for users, contributing to a smoother user experience.
- **Proposed and initiated a research project to automate Payment Affidavit processing, potentially saving significant time and resources.**

Student Technology Summer Intern

Kenston Technology Department

May 2016 - August 2020, Bainbridge, OH

- Provided on-site technical support, **resolving an average of 15 hardware and software issues per week** to minimize potential classroom disruptions.
- Implemented and maintained an inventory management system for tracking technology assets, **resulting in a 20% reduction in equipment loss**.
- Led a team of 5 student technicians, fostering a collaborative environment and delegating tasks effectively to ensure timely resolution of technical issues.