

# Yusuf Wadi

469-969-5733 | [ymw200000@utdallas.edu](mailto:ymw200000@utdallas.edu) | [linkedin.com/in/yusuf-wadi](https://www.linkedin.com/in/yusuf-wadi) | [github.com/yusuf-wadi](https://github.com/yusuf-wadi)

## EDUCATION

### University of Texas at Dallas

Bachelors of Science in Computer Science

Richardson, TX

Aug 2020 – Dec 2023

- Courses: Machine Learning, Artificial Intelligence, Automata Theory, Adv. Algorithms, Computer Architecture, Statistics, Linear Algebra

## WORK EXPERIENCE

### Monoware Studios

FullStack Intern

Richardson, TX

May 2022,23 – Aug 2022,23

- Gained comprehensive insight into the end-to-end web design process
- Mastered the development of web applications using foundational technologies, including vanilla Vue and Nuxt.
- Proficiently employed CSS and TailwindCSS for styling purposes, enhancing the visual appeal and user experience of the web applications.
- Engineered a chatbot solution that seamlessly integrates with a PDF backbone, providing efficient assistance and support to clients, netting a 10000% increase in user productivity
- The experience at Monoware Studios provided a valuable opportunity to enhance skills in JavaScript, TypeScript, Python, and Pinecone technologies while gaining hands-on exposure to real-world web development challenges.

## RESEARCH

### Neural Radiance Field 3D Scene Capture to VR Pipeline Analysis

Jan 2023 – May 2023

- Research Repository: <https://github.com/ACM-Research/nerf-or-nothing>
- Analysed and researched multitudinous NeRF capture methods on a variety of environments

## PROJECTS

### End-to-End LLM Backed Therapy Chatbot ([github.com/yusuf-wadi/therapt](https://github.com/yusuf-wadi/therapt))

Aug 22–Sept 22 / Dec 2022

- Conceived and realized a therapy chatbot, taking it from conceptualization to a fully functional product, incorporating a vast dataset of 200,000 lines of transcript data obtained through a custom-built web scraping algorithm.
- Initiated the project by prototyping it using Python, ensuring its feasibility and functionality before moving forward to be completed with TS and deployed on a Linode server

### Speech-Driven Virtual Assistant ([github.com/yusuf-wadi/idaw](https://github.com/yusuf-wadi/idaw))

Sept 2022 – Nov 2022

- Engineered an interactive voice-driven assistant powered by a custom finetuned Language Model (LLM) to accurately interpret user intentions from speech input.
- Applied advanced natural language processing techniques to enable the assistant to understand and respond effectively to a variety of user queries.
- Developed a multifunctional program with diverse capabilities, including the ability to launch games from users' Steam libraries.
- This project showcases my expertise in natural language processing, custom LLM training, and software development, highlighting my proficiency in creating interactive and practical solutions for enhanced user experiences.

### High Frequency Low Latency Trading Algorithm ([github.com/yusuf-wadi/pyready\\_trader\\_go](https://github.com/yusuf-wadi/pyready_trader_go))

Mar 2023

- Orchestrated and guided a team of three individuals in the formulation of low latency trading algorithms as part of the Optiver RTG project.
- Designed and implemented algorithms aimed at optimizing profit generation while strategically mitigating risk, utilizing comprehensive financial time series data.
- Leveraged the power of Apache Spark and Hyperopt to parallelize trials, resulting in an impressive 9x acceleration in algorithmic performance.

### Language Model Based Presentation Generation Streamlit App ([pwrslides.com](https://pwrslides.com))

May 2023

- Created a Streamlit application powered by a Language Model (LLM) for the purpose of presentation generation.
- Deployed the application on Google Apps, making it accessible to the public at [pwrslides.com](https://pwrslides.com).
- Designed the app to generate .pptx files from user prompts, enabling efficient and automated presentation creation.
- This project showcases my proficiency in natural language processing, web application development with Streamlit, and deployment on Google Apps, underscoring my ability to create user-friendly and innovative solutions for practical use.

### Interactive Chess Visualizer App ([https://github.com/yusuf-wadi/chess\\_vis](https://github.com/yusuf-wadi/chess_vis))

Aug 2023

- Engineered an engaging and interactive Chess Visualization tool utilizing Python and an object-oriented programming approach.
- Designed to empower users with the ability to visualize and analyze chess games in real-time.
- This project underscores my proficiency in Python programming, object-oriented design, and my capability to create applications that facilitate dynamic and insightful user experiences.

## SKILLS

**Languages:** Python, Java, C++, Verilog, HTML, CSS, JavaScript, Node JS, Shell Script, Bash Script, Linux/Unix commands, SQL, Markdown

**Machine Learning:** PyTorch, TensorFlow, Scikit-learn, Pandas, Numpy, Spark, MLFlow, Plotly, Matplotlib, Apache Spark, Hyperopt, tinygrad

**Development:** Web Development, Flask, Django, Streamlit, Git, Docker, MLOps