

EDUCATION

Louisiana State University, Baton Rouge, LA

Bachelor of Science in Computer Science, Second Discipline in Mathematics

December 2024

GPA: 3.23/4

WORK EXPERIENCE

Pennington Biomedical Research Industry, Baton Rouge, LA

May 2024 - August 2024

Machine Learning and Software Engineer Intern

- Demonstrated the potential of machine learning models to replace DEXA scanners by conducting feature selection and correlation analysis to identify significant biomarkers influencing health indicators for improved model interpretability
- Analyzed and processed a comprehensive dataset of 515 patients, incorporating 49 biomarkers to enhance the accuracy of predictive models for ALM, BMD, and BFP, resulting in a 15% improvement in model performance
- Implemented advanced machine learning algorithms such as Polynomial Regression, SVR, Random Forests, and XGBoost to optimize predictions of key health indicators, resulting in a 20% increase in model accuracy

AP Lifting Gear Limited, Remote

June 2021 – August 2021

Software Engineer Intern

- Utilized HTML, CSS, and JavaScript to implement responsive design, enhancing website accessibility and ensuring seamless performance across all device types, improving user experience and engagement
- Optimized website performance using Google PageSpeed Insights, GTMetrix, caching, and image compression, reducing load times by 30% and improving user retention
- Collaborated with cross-functional teams to deploy new features using WordPress and PHP, streamlining website content management, which reduced downtime by 15%, enhancing operational efficiency and content updates

PROJECTS

Death Throes: Unity-Based Adventure Game

February 2024 - May 2024

- Developed an adventure game in Unity, leading to the creation of a fully functional prototype that demonstrated key gameplay mechanics such as character movement, inventory management, and quest systems
- Utilized C# scripting in Unity to develop custom game logic and interactive features, enhancing the game's functionality
- Implemented core game mechanics, including AI-driven NPC behaviors and physics-based interactions, resulting in a smooth and engaging player experience
- Conducted comprehensive testing and debugging, reducing game-breaking bugs by 90%, improving game's stability

Building Dreams: Custom PC Configuration Website

March 2024 - May 2024

- Developed a custom PC building website, utilizing Django and React (NextJS), that allowed users to select compatible components for their builds, leading to a decrease in build configuration errors
- Implemented real-time chat functionality using Django Channels and WebSockets, facilitating instant communication between users and admin support
- Integrated Django's ORM API using Django REST Framework to streamline communication between the frontend and backend, leading to an improvement in data retrieval speed and a reduction in server response time

Price Predictors: Quantitative Trading Algorithm

September 2023 - December 2023

- Developed a data analysis pipeline using Python and relevant financial APIs like YFinance and Alpaca to provide accurate quantitative analysis and support better decision-making in financial markets
- Collaborated with a cross-functional team to optimize the sentiment analysis algorithm with NLTK by refining data preprocessing and sentiment scoring methods, leading to a 20% improvement in stock price prediction accuracy
- Utilized advanced statistical techniques to improve the accuracy of time series forecasting through enhanced data preprocessing and model refinement, resulting in 15% more precise trading signals and increased profitability

TECHNICAL

- Language & Tools: C++, C#, HTML, CSS, Unity, Python, Java, Django, React, Docker, Object Oriented Programming, Operating Systems, Machine Learning, Software Testing, SDLC, NextJS, WebSockets, RESTful APIs, GTMetrix, PHP, WordPress, Angular, Vue.js, Node.js, .NET, Agile Methodologies, Problem-Solving