# GIOVANNI OHASHIEGBULA

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## EDUCATION

**Louisiana State University,** Baton Rouge, LA                             December 2024
Bachelor of Science in Computer Science, Second Discipline in Mathematics                      GPA: 3.23

## WORK EXPERIENCE

**Pennington Biomedical Research Institute,** Baton Rouge, LA          May 2024 - August 2024
Machine Learning and Software Engineer Intern

- Built a Jupyter ML pipeline that surfaced key biomarkers via feature-selection and correlation analysis, demonstrating a low-cost alternative to DEXA scans
- Selected top biomarkers from 49 features for ALM, BMD, and BFP prediction, boosting model interpretability and eliminating 60% of non-informative attributes
- Evaluated Polynomial Regression, SVR, Random Forest, and XGBoost pipelines, improving predictive accuracy by 20% and reducing MAE by 15%

**AP Lifting Gear Limited,** Remote                                    June 2021 – August 2021
Software Engineer Intern

- Implemented responsive layouts in HTML, CSS, JavaScript, improving Lighthouse mobile accessibility score
- Reduced average page load time by 30% via image compression, caching, and code splitting, increasing session duration by 18%
- Integrated WordPress and PHP feature deployments, cutting content update downtime by 15%

## PROJECTS

**Death Throes: Unity Adventure Game | C#, Unity**                    February 2024 - May 2024

- Co-developed Unity adventure game with physics-based interactions, NPC AI behaviors, Inventory and quest systems.
- Utilized C# scripting to develop custom game logic and designed tile-based maps with custom sprites
- Implemented audio using Unity AudioMixer and packaged project into standalone Windows build, boosting demo-day engagement amongst 30+ peers

**Building Dreams: Custom PC Configurator | Django, React(Next.js), TailWindCSS**       March 2024 - May 2024

- Co-developed 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
- Developed the homepage and sign-in/sign-up interfaces using React (NextJS) and TailwindCSS, implementing client-side routing, form validation, and persistent session handling to streamline user onboarding
- Integrated frontend with the Django backend by creating REST API calls for database entry, and conducted parts research to curate and filter PC component listings for compatibility and price totaling features

**Alpha-Generator: Quantitative Trading Algorithm | Python, NLTK, Alpaca**        September 2023 - December 2023

- Co-developed an AI-driven stock trading assistant that leveraged machine learning for predictive analytics, automated trade execution, and real-time portfolio insights
- Developed data ingestion pipelines and API interfaces to retrieve, normalize, and store real-time market and sentiment data from Alpaca and other external sources, ensuring seamless data flow into the predictive engine
- Implemented C++ DataFrame modules for normalization, rolling mean/standard deviation calculations, and feature extraction functions to prepare high-quality datasets for the ML models driving stock predictions

## TECHNICAL

- **Language**: Python, C++, Java, C#, HTML, CSS, PHP
- **Frameworks & Tools**: Unity, Django, React, Next.js, Angular, Vue.js, .NET, Docker, GTMetrix, WordPress, Node.js, Pandas, Scikit-learn, NLTK, YFinance, Alpaca, Rest APIs, Websockets, Git, Google Pagespeed, Jupyter
- **Methodologies**: OOP, SDLC, Rest APIs, Agile, Scrum, TDD