

JANE ODUM

📍 ATHENS, UNITED STATES 📞 7623168444

◦ DETAILS ◦

Athens
United States
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◦ LINKS ◦

[LinkedIn](#)

◦ SKILLS ◦

Machine Learning & Deep Learning

Scalable System Design &
Distributed Computing

Natural Language Processing &
Computer Vision

C/C++

Python

Java

Tensor flow

pyTorch

LLM

◦ HOBBIES ◦

Painting, Dancing, Working out
and travelling.



EMPLOYMENT HISTORY

Graduate Teaching Assistant at University of Georgia, Athens

January 2021 — Present

- Collaborated with Prof. Shelby Funk and Dr. Michael Cotterell in delivering course content for Theory of Computing and Human-Computer Interaction.
- Evaluated and graded assignments and exams with adherence to university grading standards, providing timely and constructive feedback.

Software Developer(Intern) at Orbital Schools, Ilorin

May 2018 — August 2018

- Spearheaded the development of dynamic websites utilizing the LAMP stack, enhancing client digital presence with Linux, PHP 5, CSS, and MySQL.
- Executed seamless integration of payment processing capabilities by embedding PayStack and other APIs into Orbital Schools' web platform.



EDUCATION

PhD Computer Science, University of Georgia, Athens

December 2025

- **Research Interest:** Time Series Forecasting, Generative AI, NLP, Content understanding using large Language models and multi-modal machine learning.
- **Coursework:** Machine Learning, Algorithms, Software engineering, Data mining, Trustworthy Machine Learning, Databases, Advanced Robotics, Human-Computer Interaction and Advanced Representation Learning.

Software engineering, 42 Silicon Valley, Fremont

December 2019 — December 2020

Bsc Computer Science, University of Ilorin, Ilorin

October 2016 — October 2019



PUBLICATION

Adaptive Quantile Guidance in Diffusion Models: Multi-Dataset Learning for Pandemic Time Series

- **Developed AQDiff**, a diffusion-based framework for epidemiological forecasting, leveraging multi-dataset pre-training (CDC influenza, COVID-19, RSV) and adaptive quantile guidance to dynamically adjust prediction intervals. Achieved **73.3% lower MAE** than state-of-the-art models (CSDI, PatchTST) across pandemic scenarios.
- **Introduced real-time error feedback** via exponentially weighted residual statistics, enhancing volatility adaptation with <10% computational overhead. Demonstrated robustness in sparse data methods and statistically significant improvements during outbreak surges.
- <https://openreview.net/pdf?id=hnxkDiupF6> (Under Review)

★ PROJECTS

○ Prompt Fusion in Stable Diffusion

- Collaborated on the Prompt Fusion project to optimize image generation by consolidating positive and negative prompts into a single efficient pass.
- Utilized LPIPS and Siamese networks for image evaluation, and BERT for prompt similarity, significantly improving optimization time and image-prompt alignment.

○ HumorAI: Enhancing LLM for Implicit Humor and Sentence Analysis

- Engineered an advanced LLM model for sentiment analysis, integrating humor recognition to refine sentence similarity scores and enhancing the model's language understanding capabilities.
- Utilized contrastive loss to train the SBERT and BERT models, distinguishing between similar and dissimilar sentence pairs for sentiment analysis.
- Applied this enhanced model to a chatbot and Twitter sentence similarity tasks, achieving a noticeable 15% improvement in performance accuracy compared to other existing models, demonstrating its effectiveness in practical applications.

○ StockCluster: Enhancing Investment Portfolios

- Devised a clustering algorithm for stock market analysis, and achieved a 6.89% ROI increase by optimizing portfolio diversification.

○ Risk-Aware Task Allocation in multi-robot system

- Developed a risk-aware multi-robot task allocation model, factoring in task dependencies and robot characteristics to optimize performance while minimizing risk, increasing operational efficiency by 40% and improving task completion rates
- Expanded the approach to tackle the ST-MR-TA challenge, improving real-world task allocation efficiency.

🌱 LEADERSHIP

○ GOOGLE DEVELOPER STUDENT LEAD at Google, Ilorin

July 2018 — August 2019

- As a Google Developer Student Lead, guided 300+ students across 11 African countries in web and mobile development, focusing on local challenges.

○ UNITED AMBASSADORS (MUN). NEW YORK at Model United Nations, New York City

August 2018 — August 2018

- Represented the US as a UN Ambassador, advocating for global peace and spearheading immigrant and refugee rights discussions among 55 international ambassadors.