CHRISANTUS EZE

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EDUCATION

Oklahoma State University (OSU) | Ph.D., Computer Science (in-view)

[Expected: May 2026]

- Research Focus: AI & Robotics, specializing in reinforcement learning, imitation learning, computer vision, self-supervised learning, and active learning
- Dissertation focuses on developing robust robot manipulation strategies for complex environments

Federal University of Technology, Owerri (FUTO), Nigeria | B.Eng. in Electrical & Electronic Eng October 2013 - October 2018

- Graduated with First Class Honors
- **Senior Thesis:** Design and Construction of a Microcontroller-based Power Outlet for Monitoring and Control of Appliances

PUBLICATIONS

- Uzoamaka Ezeakunne, Chrisantus Eze, and Xiuwen Liu. "Data-Driven Fairness Generalization for Deepfake Detection." Proceedings of the 17th International Conference on Agents and Artificial Intelligence (ICAART). 2025.
- Chrisantus Eze and Christopher Crick. Learning by Watching: A Review of Video-based Learning Approaches for Robot Manipulation (Under-review)
- Chrisantus Eze and Christopher Crick. A3: Active Adversarial Alignment for Source-Free Domain Adaptation. IEEE International Conference on Machine Learning and Applications (ICMLA), 2024.
- Chrisantus Eze and Christopher Crick. Enhancing human-robot collaboration by exploring intuitive augmented reality design representations. Proceedings of the 18th ACM/IEEE International Conference on Human-Robot Interaction (HRI), 2023

RELEVANT EXPERIENCE

Department of Computer Science, OSU | Graduate Student Researcher

January 2022 - Present

- Leading innovative research in robot manipulation, focusing on developing advanced algorithms for complex object grasping in cluttered environments using deep learning approaches
- Successfully implemented and evaluated novel deep learning architectures combining computer vision, sequence models (LSTM, Transformers), and reinforcement learning for robust manipulation tasks
- Developed a state-of-the-art domain adaptation framework that enables effective transfer learning between source and target domains without requiring source data
- Published multiple peer-reviewed papers in top-tier robotics and AI conferences, demonstrating significant contributions to the field of robot learning and manipulation
- Mentoring junior researchers and collaborating with cross-functional teams to advance the lab's research agenda

Google Computer Science Research | Graduate Student Mentee

February 2023 - Present

- Collaborating with the Google Robotics Research team on advanced manipulation strategies for cluttered environments
- Developing novel approaches to robot learning and manipulation under expert mentorship
- Contributing to research projects at the intersection of computer vision and robotics
- Participating in regular research discussions and presentations with Google's robotics team

Upward Bound | *Instructor*

June 2024 - July 2024

- Designed and delivered a comprehensive computer science curriculum for 19 first-generation high school students
- Created hands-on projects including drone controller development and programming
- Introduced fundamentals of Python programming through practical, engaging projects
- Mentored students in both technical skills and academic career planning

Lake McMurtry | Software Engineer (Volunteer)

March 2022 - Present

- Developed and maintaining cross-platform mobile applications for lake visitors using Flutter/Dart
- Implemented real-time updates for trail conditions, weather alerts, and facility availability
- Created intuitive user interfaces optimized for outdoor use conditions
- Managing continuous deployment and updates across both iOS and Android platforms

Seamfix Limited, Nigeria | Software Engineer

January 2019 -

December 2021

- Led the development and implementation of an AI-based biometric face-matching system for Android and Windows platforms, significantly enhancing subscriber validation accuracy during SIM registration
- Spearheaded the modularization of the BioSmart Software Suite, resulting in a 15% revenue increase through improved client adaptability and reduced engineering overhead
- Successfully managed a team of 5 engineers in implementing a critical NCC mandate for linking subscriber phone numbers to National Identity Numbers (NIN)
- Architected and deployed scalable solutions that facilitated the successful linking of over 100 million subscriber phone numbers to their NINs
- Implemented robust API integrations and optimized system performance to handle high-volume transaction processing

NON-RESEARCH PROJECTS

Scene Understanding and Segmentation Model

- Developed an advanced segmentation model for dense cluttered environments
- Implemented object relevance calculation system for selective retrieval
- Created end-to-end pipeline for scene analysis and object manipulation
- Integrated system with robotic platforms for real-world testing

Fraud Detection Model

- Developed machine learning models for real-time fraud detection in financial transactions
- Implemented anomaly detection algorithms for identifying suspicious patterns

- Created visualization tools for fraud pattern analysis
- Achieved significant improvement in fraud detection accuracy

Financial Analysis (Stock Prediction)

- Developed predictive models for stock price movements using historical data
- Implemented advanced time series analysis techniques
- Created a comprehensive data visualization dashboard
- Integrated multiple data sources for improved prediction accuracy

Healthcare Analysis (Disease Prediction)

- Built predictive models for patient readmission rates
- Analyzed large-scale healthcare datasets for pattern identification
- Implemented machine learning algorithms for disease risk assessment
- Created interactive dashboards for healthcare metrics visualization

SKILLS

Programming Languages

Advanced: Python, Java, JavaScript, Dart & Flutter

• Proficient: Java Springboot, Node.js, Kotlin, Swift

• Familiar: MATLAB, Arduino

Technologies & Frameworks

• AI/ML: PyTorch, TensorFlow, OpenCV, scikit-learn

• Robotics: ROS, Gazebo, MoveIt

• **Development:** Git, Linux, Docker, REST APIs

Research Areas

 Primary: Imitation Learning, Reinforcement Learning, Computer Vision, Deep Learning, Robot Learning

• Secondary: Human-Robot Interaction

• Interests: Grasping in Clutter, Visual Imitation Learning, Learning from Demonstrations

HONORS & AWARDS

- Computer Science Graduate Research and Leadership Award, Oklahoma State University (September 2023)
- Association for Computing Machinery (ACM) 2022 Hackathon First Place Winner (March 2022)
- MTN Foundation Science and Technology Scholarship (September 2015)
- Agbami Medical and Engineering Professional Scholarship (July 2014)