

# ALDRIDGE KALENGA

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## EDUCATION

### Bethune-Cookman University

Major: B.S. Computer Science, Minor: Mathematics  
Presidential Scholar  
4.0 GPA

Daytona Beach, FL  
December 2025

## SKILLS & TECHNOLOGIES

**Languages:** Python, Java, Kotlin, JavaScript, MATLAB, Kusto (KQL), Bicep

**Technologies & Tools:** Android Development (Views & Jetpack Compose), Machine & Deep Learning, Computer Vision, Linux (Ubuntu), Arduino, Azure Data Explorer (ADX), Tableau, ArcGIS Pro, SharePoint Development

## PROFESSIONAL EXPERIENCE

### Microsoft

Software Engineering Intern

Cambridge, MA  
May – August 2025

- Improved a time-series anomaly detection pipeline using Kusto, Bicep and ADX
- Added logic that enabled more accurate detection of meaningful incidents while minimizing false positives, reducing noisy alerts by over **70%**
- Introduced a targeted anomaly visualization that propelled accelerated triage and eased cognitive load for engineers

Software Engineering Intern

Cambridge, MA  
May – August 2024

- Worked on migrating Android View elements to Jetpack Compose, enhancing UI and reducing code complexity
- Built and integrated UI elements into the testing infrastructure, improving test coverage and reliability
- Modified UI elements to expand usability for testing across multiple test accounts, beyond the previously limited default account

### EcoCar EV Challenge

Machine Learning and Research & Development Intern

Daytona Beach, FL  
May 2023 – Present

- Formulated an autonomous driving system achieving **99%** accuracy using Python, OpenCV, and MATLAB
- Designed YOLO-based CNN and tuned ANNs for real-time vehicle and face recognition across diverse conditions.
- Contributed to simulation-to-real-world deployment efforts, improving model robustness and inference reliability

### U.S. Fish and Wildlife Service (USFWS)

Academic Intern

Remote – Daytona Beach, FL  
October 2022 – Present

- Developed a tool to extract metadata from geospatial XML files and auto-populate Excel records
- Integrated data on American Crocodile populations from multiple sources into a uniform Geographic Information System (GIS) layer, and updated species webpages for at-risk and listed species
- Enhanced **3 distinct SharePoint sites** for different USFWS teams within **1 year**, including building 2 sites from scratch, which fostered organizational efficiency and collaboration

## PROJECTS

### Bethune-Cookman University Building Evaluation Tool

- Spearheaded the implementation of a real-time data entry and tracking system, optimizing resource allocation
- Collaborated on the project to develop an input screen to automate data entry records for building evaluations after Hurricane Ian, resulting in **100%** data accuracy and reducing data entry time by **over 70%**
- Employed Power Automate, Microsoft Forms and Excel to track costs of repairs, managing and overseeing **millions of dollars** in expenses while automatically generating reports

## EXTRACURRICULAR ACTIVITIES

Bethune-Cookman University Tutor – Mathematics | Apple Pathways Alliance Scholar | IEEE Daytona Section

## INTERESTS

Learning | Service | Artificial Intelligence | Robotics | Retrieval Augmented Generation | Robotics | Reading