Week 2 Presentation

By DeAndre Bailey



Introduction

My name is DeAndre Bailey

I am from the University of Central Florida
Majoring in Computer Science

No Prior Research Experience

Interests: computer vision, medical AI, deep learning

What is my Project

Project 20: SmartOR-Check: AI-Assisted Operating Room Readiness Verification Using Computer Vision

Mentors: Dr. Chen Chen, Yuanhao Zhou, Darinka Townsend Hinostroza

Category One: Surgical Tool Detection for SurgVU26: Classification & Localization in Robotic Surgery Video



Progress

Downloaded CholecTrack20 Dataset for Multi-Class Multiple Tool Tracking in Laparoscopic Surgery for Testing

Testing how well the **LocateAnything** Performs

You hand it an image and a text phrase, and it returns bounding boxes for whatever you described.

Working on Getting the Model Running on Newton

Plan for this week

- Based on the literature survey, identify the state of the art specialized models (maybe specifically tuned for surgical tools classification and localization) as well as the general object detection and segmentation models such as LocateAnything.

- Run those models to get some baseline results and identify the best performance baseline models. Then the effort will be use it as the foundation and come up with some news ideas to improve the performance and hopefully win the challenge.

- Set up weekly meeting with your mentors Yuanhao and Darinka to discuss progress.