SUMMER INTERNSHIP

Multimodal Perception Lab
IIIT-Bangalore

CONTENTS

PEOPLE

- **Prof. Dinesh Babu**
- **Mentor: Ms. Jeba Berlin**
- **Vidhish Trivedi**
- **Deepkumar Patel**

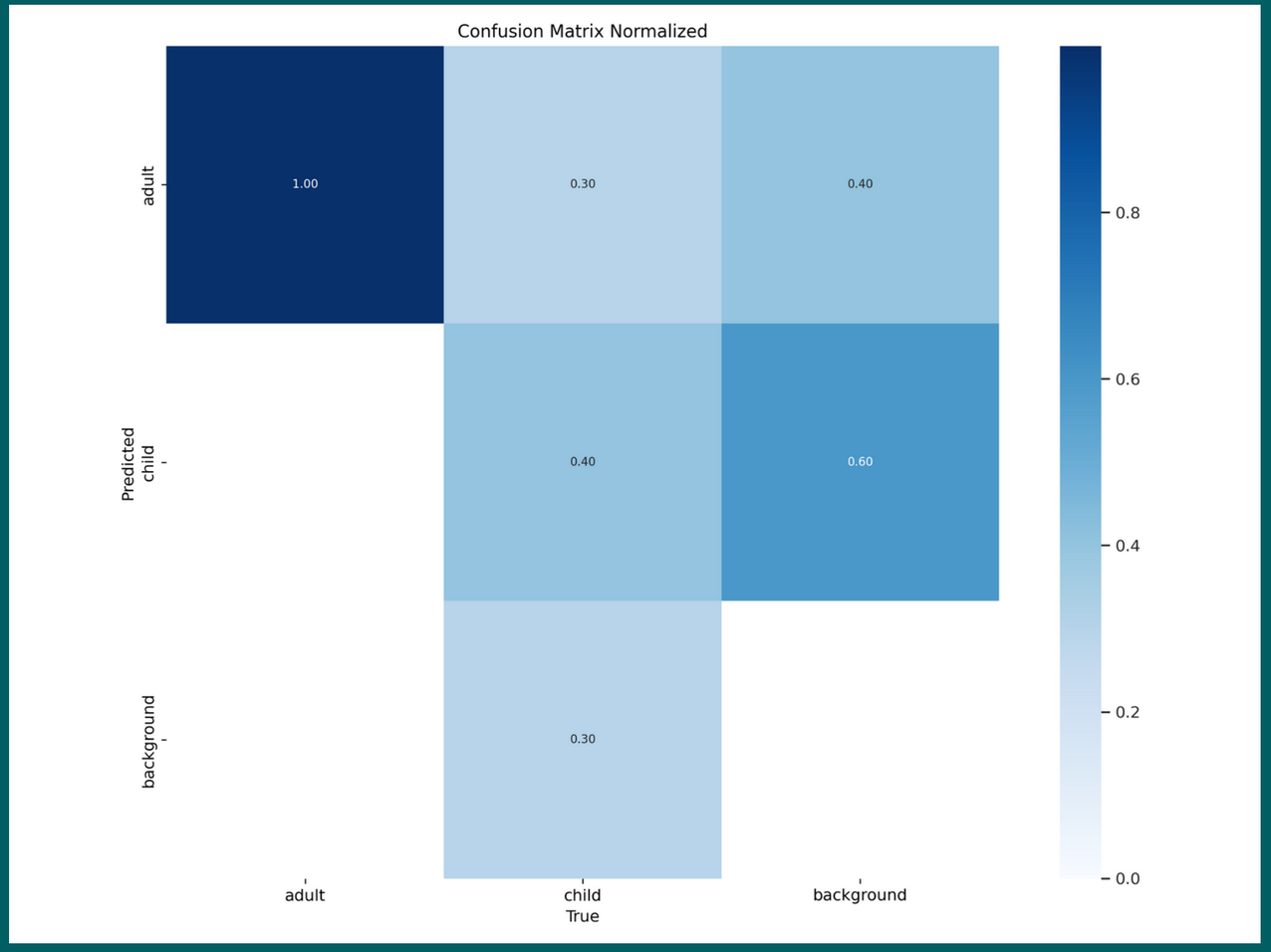
PROJECT DESCRIPTION

- The objective of this project is to utilize recorded sessions (video) to predict whether a child has autism or not.
- Our initial focus is on training a model capable of detecting objects belonging to child and adult classes within an image.
- To accomplish this, we are currently using the YOLOv8 framework.

WORK SO FAR...

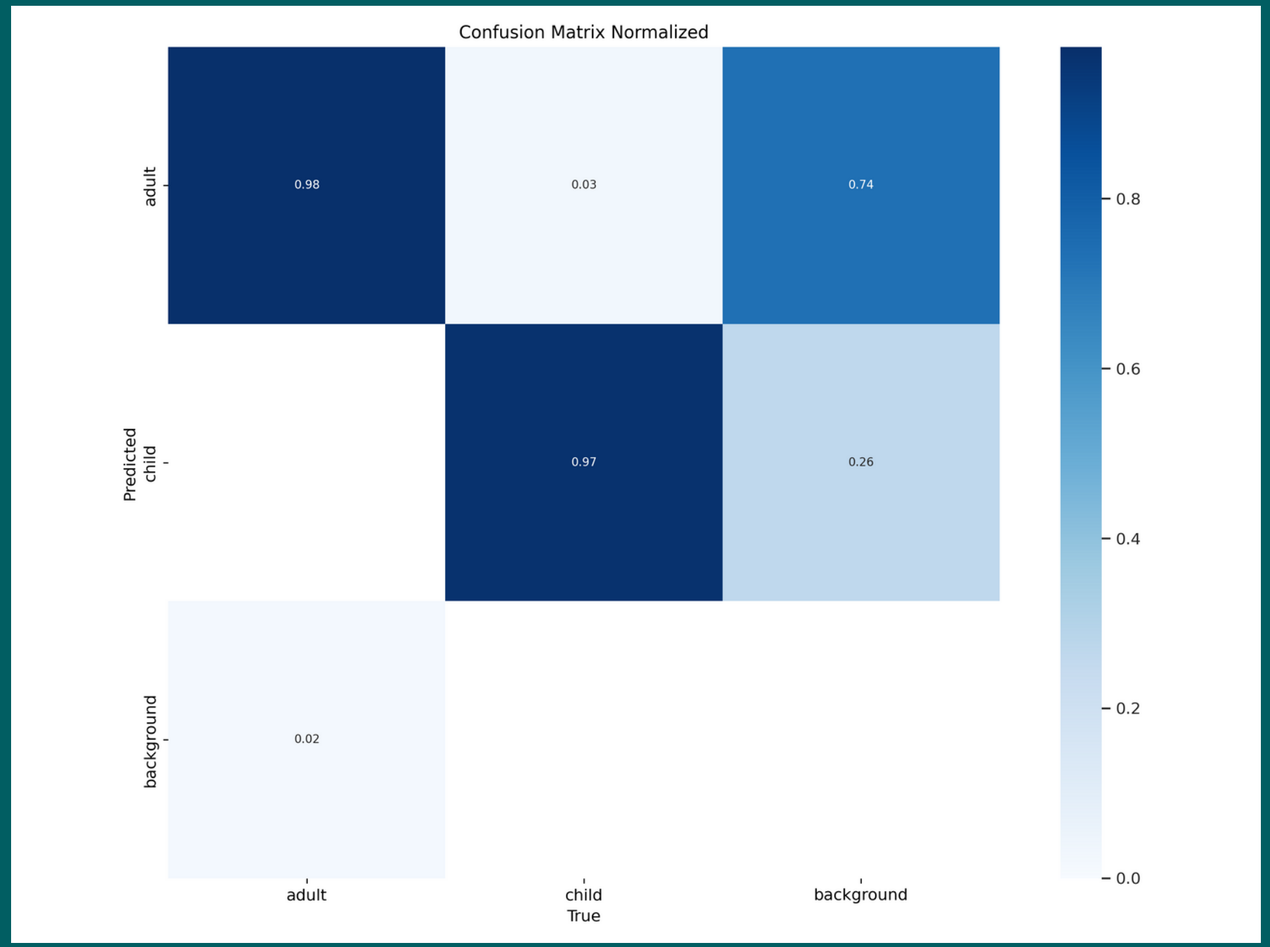
- We first gathered images (around 250) from the internet for our dataset and annotated them with bounding boxes.
- The results obtained from training variations of the YOLOv8 model on this dataset were not good.
- Our mentor then shared a dataset of short videos from which we extracted 1013 images (710 training, 150 validation, 153 testing).
- We trained YOLOv8s model on this new dataset and have made progress in terms of results and predictions that this model makes.

RESULT SUMMARY



Old dataset with around 250 images

RESULT SUMMARY



New dataset with around 1000 images

OTHER THINGS

Exploring Tensorflow and Pytorch

Reading papers shared by our mentor

Understanding CNNs through online resources

THANK YOU!