What’s new in CoreML

UnderDog Developer Xcoders Meetup

By: Quin’darius Lyles-Woods

Overview of the Talk

- Introduction
- Overview of CoreML
  - What is a (ML)mode and how does it work?
  - CoreML Usage
- What’s new in CoreML
- Conclusion

About Quin’darius

- Programmer
- Student
- Works at Rekor
- Tinker

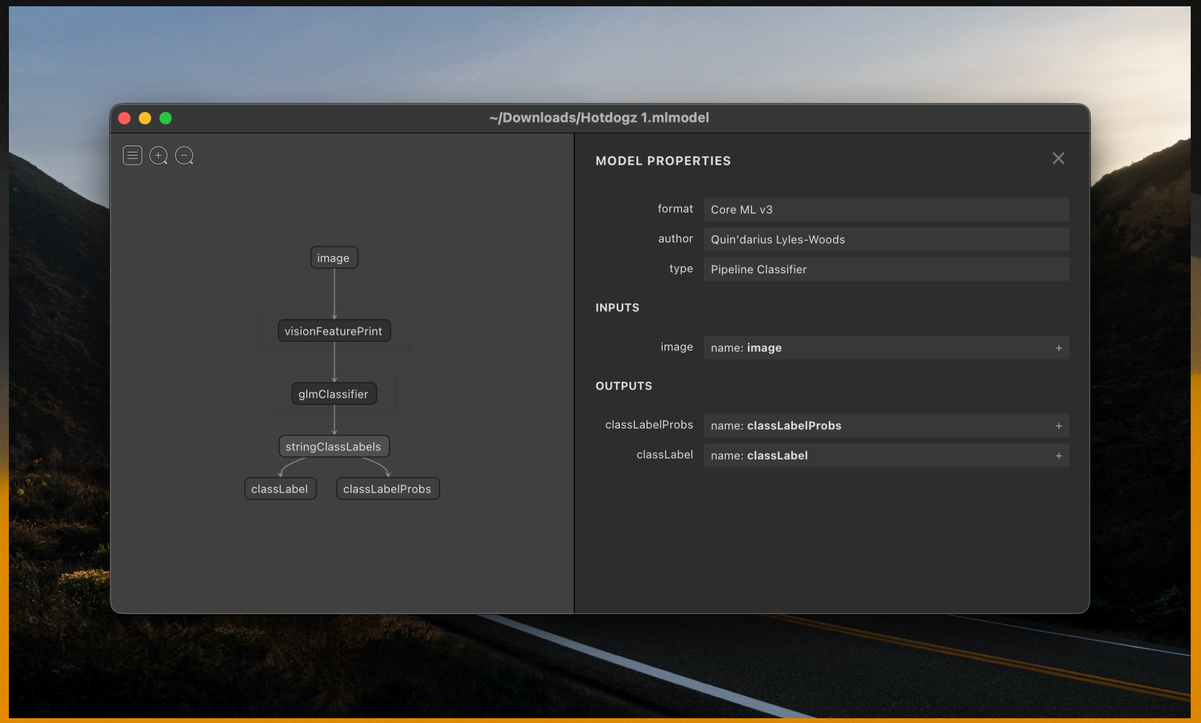
History with Machine Learning

- Building agents in the web
- Building Natural Language Models
- Now working on a Machine Vision Application

Overview of CoreML

What is a (ML)Model and how does it work?

- Framework that helps you make predictions.
- Predictions are based off of given models
- Models are a Algorithms



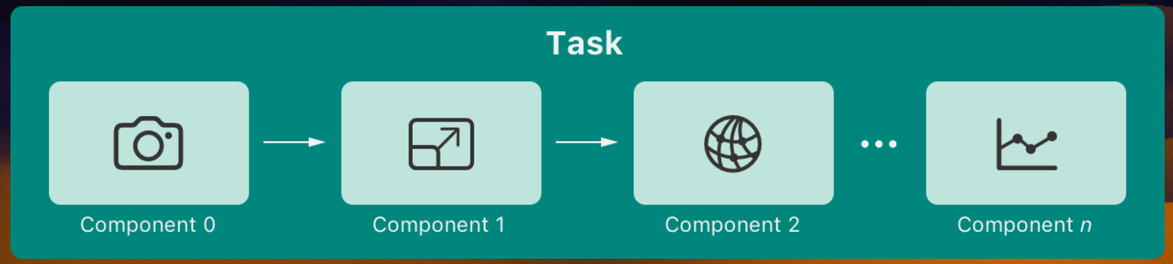
Overview of CoreML

CoreML Usage

- Gives you an API to make predictions
- Makes conforming to your models inputs easier
- Easier way of communicating to your models

What’s new in CoreML

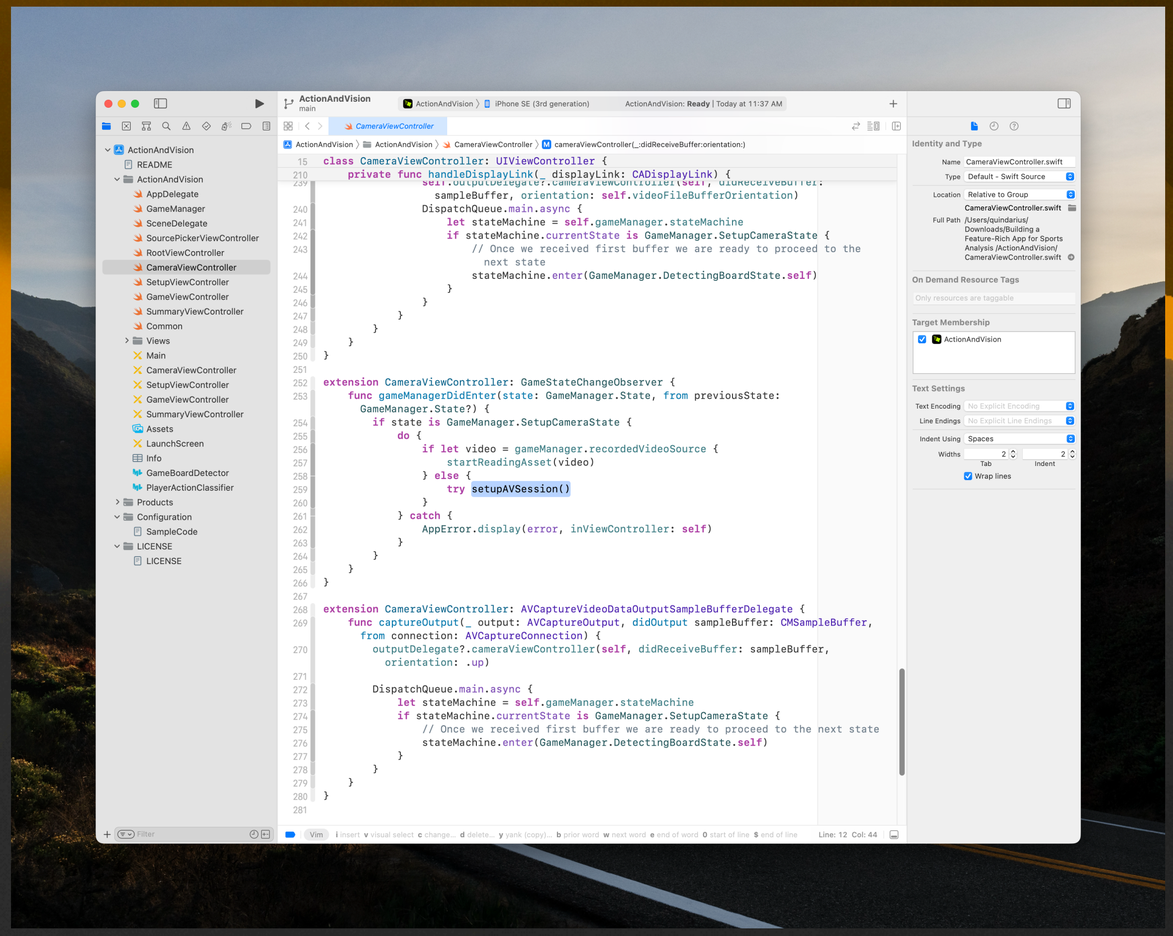
Actually not all too much.



What’s new in CoreML

The old world order

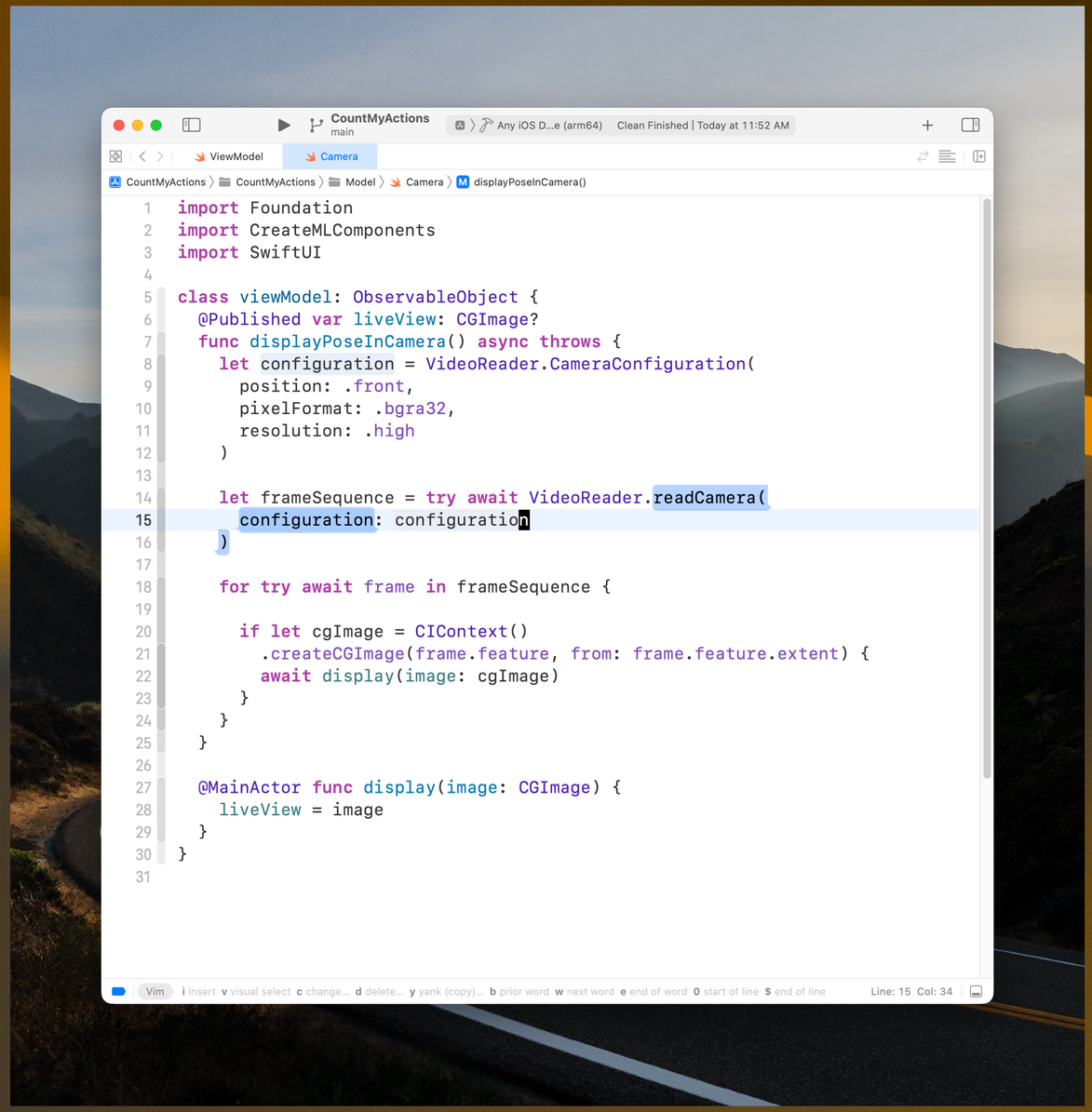
- Using Vision to accomplish Machine Learning Task.
- 300 SLOC for Camera Configuration
- Easy to understand, not.



What’s new in CoreML

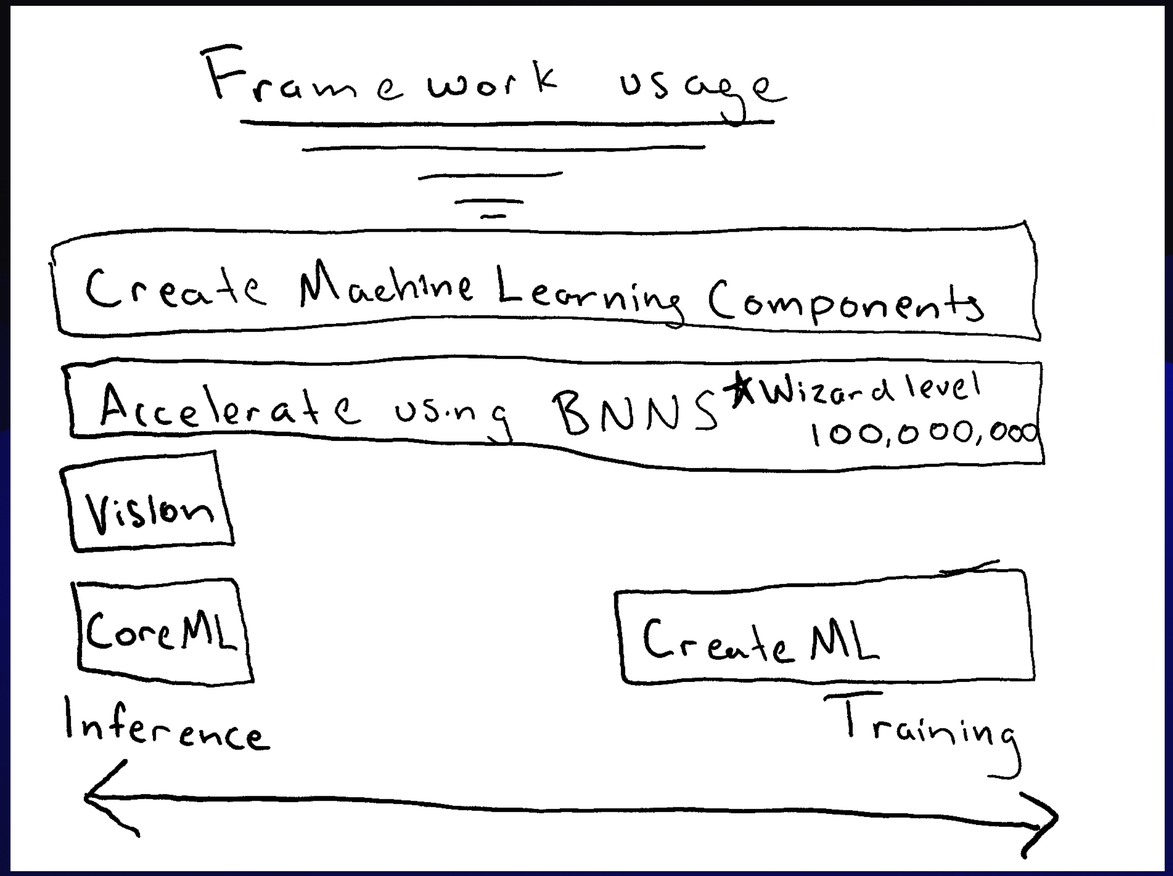
The new world order

- VideoReader can produce an AsyncSequence of frames
- For await syntax for your pipeline
- 30 SLOC



What's new in CoreML

An Overview of the Machine Learning Ecosystem currently at Apple.



Conclusion

Questions?

- Create Machine Learning Components Does more than just Training.
- Apple is challenging the way we think about machine learning models.
- Getting started with machine learning in an application is easier than ever.

The entire talk is available on my website
https://quindarius.com