



**I'll have what she's having**

**Deep Learning project for Metis**

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Why?



# Data

**Collect**

**Clean**

**Separate**

- Photos were downloaded directly from Google, using a batch downloading extension for chrome
- Recipes and ingredients for cocktails were pulled from [thecocktaildb.com](http://thecocktaildb.com)

- Manually scanned each photo to remove noise, and crop \*some\* distracting backgrounds

- After cleaning, separated 50 photos per cocktail into a separate training folder

**Margarita**

**Old Fashioned**

**Aperol Spritz**

**Mojito**

**Pina Colada**

**Mimosa**

**Moscow Mule**

**Bloody Mary**

**Cosmo**

**Irish coffee**

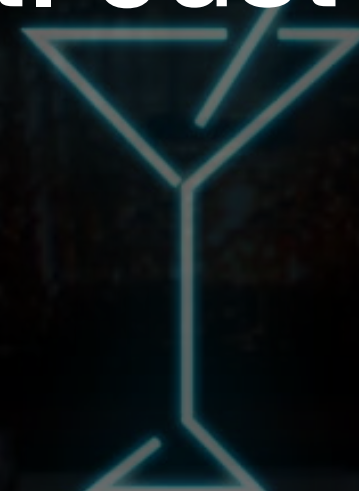


# Modeling Methodology

Surprisingly, these scores did not come from transfer learning.

Then expanded to more classes, and began to tune the hyperammmers


I started off small to test the viability of the project. Just 3 classes



	Train	Val
Base	70%	74%



	Train	Val
Tuned	51%	48%

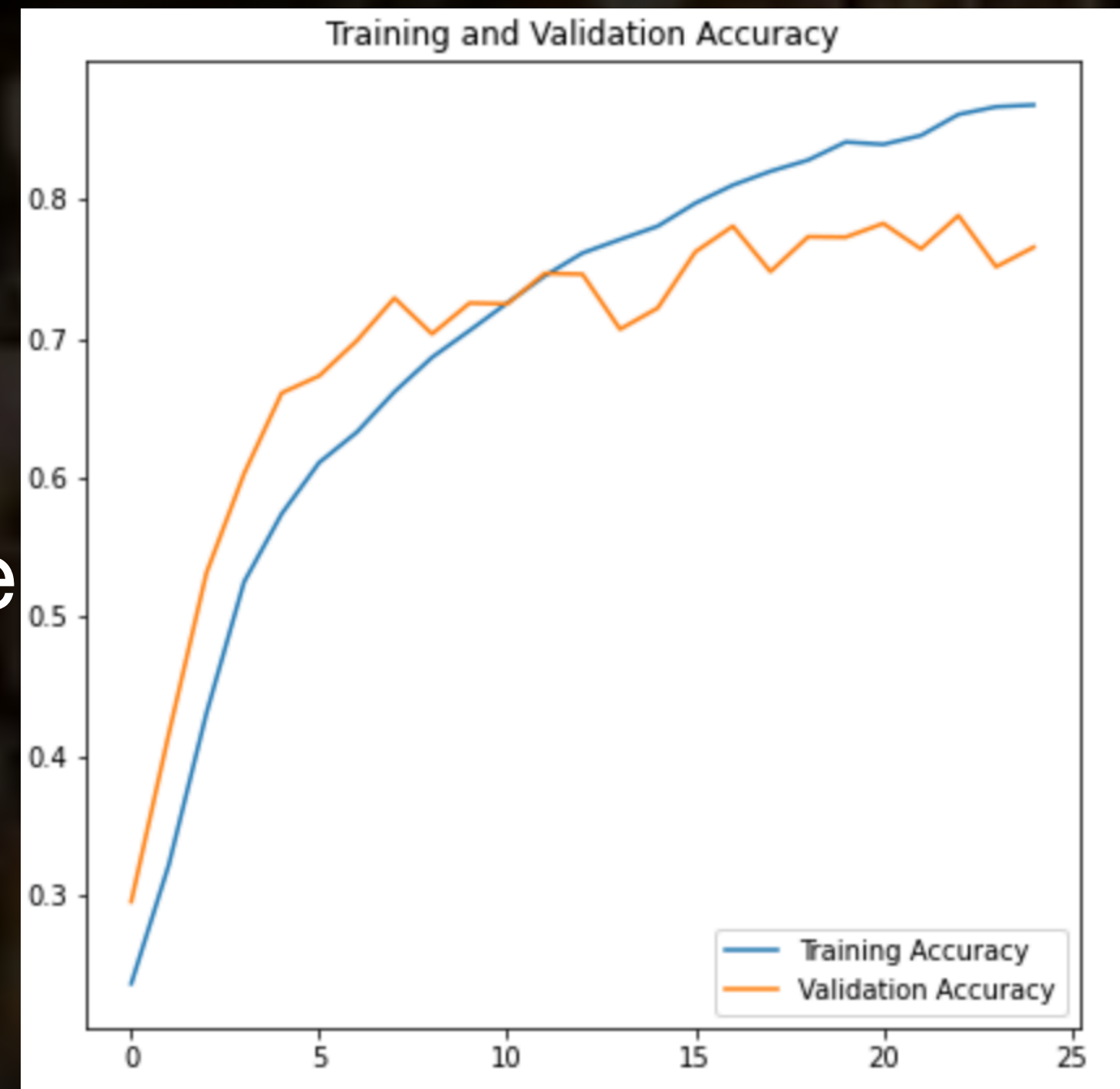


	Train	Val	Test
	80%	78%	75%



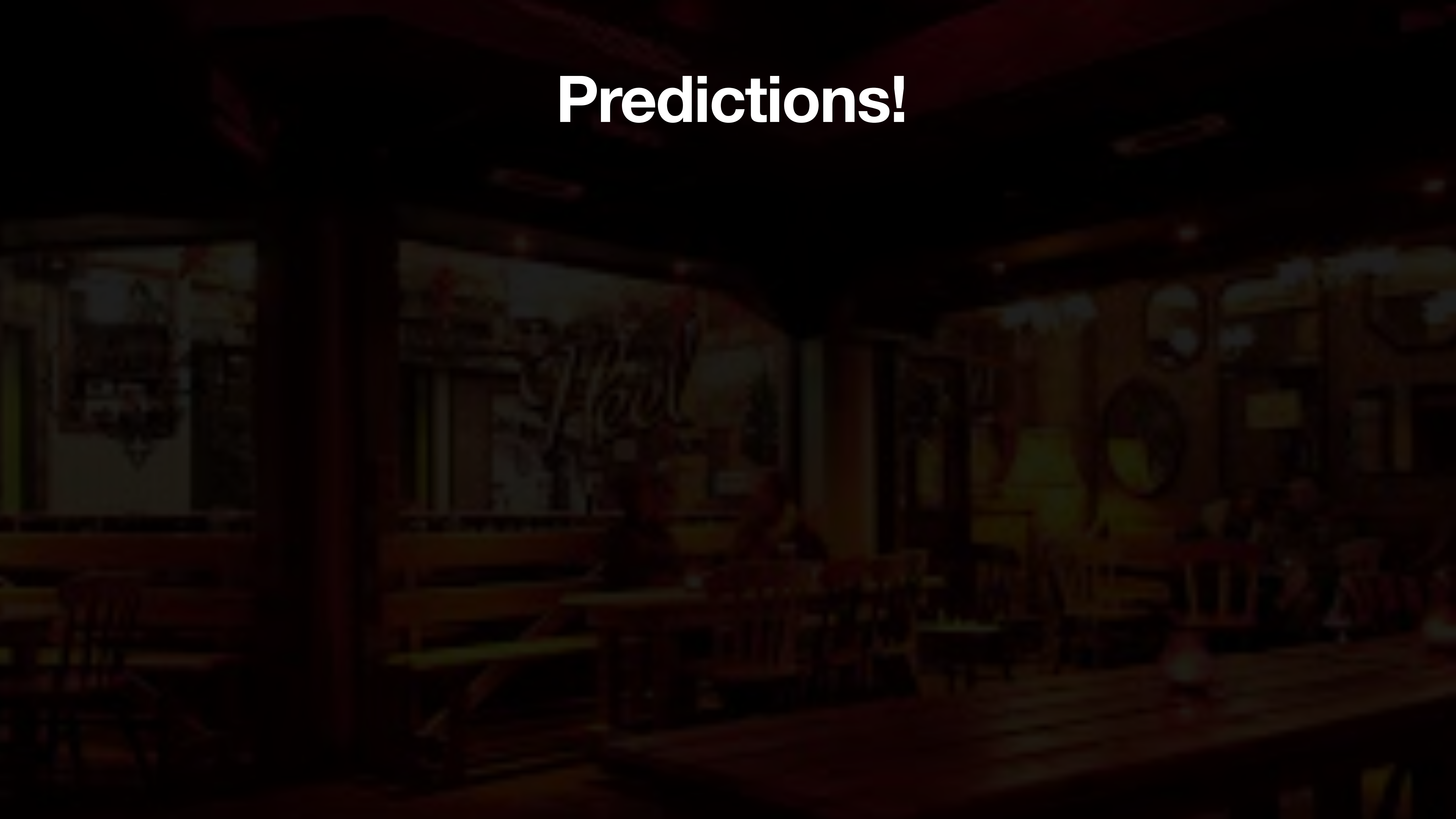
# Tuning the final model

- 5 Convolutional layers, ranging from
- 6 Dense layers including the optimizer
- 17 Epochs seemed to b





# Predictions!



# Future Work

- SO MUCH
- More cocktails, more pictures, more time to tune and test different models.
- On the app side - could be further developed to show varieties, like strawberry/jalepeno margarita