

Machine Learning and React Native

@ray_deck

Functions Written by Machines

Supervised Learning

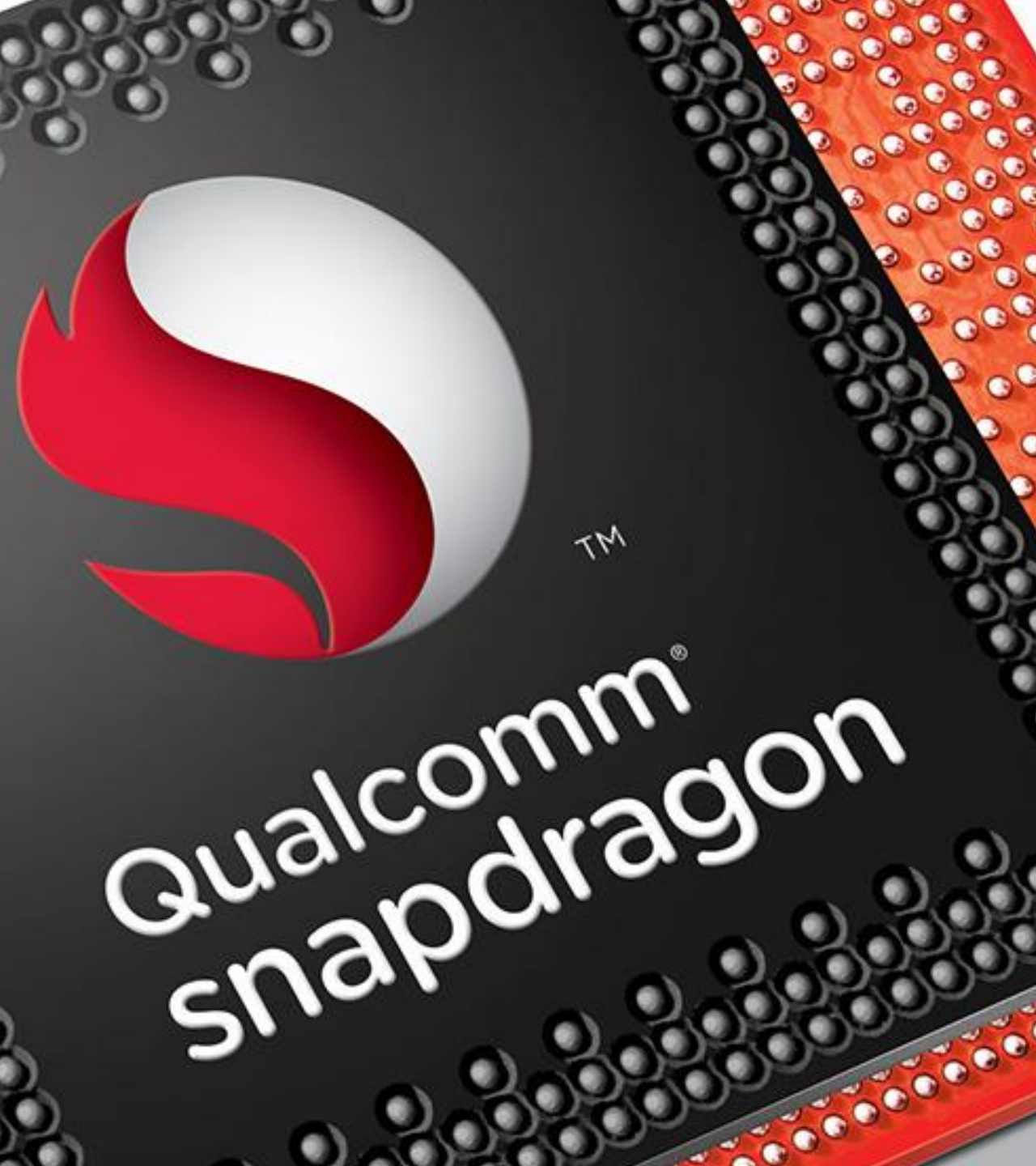
Transfer Learning

Reinforcement Learning

Adversarial Networks

A close-up photograph of the Apple A11 Bionic chip. The chip is a dark, rectangular integrated circuit with a grid of gold-colored pins along its edges. The text "A11 BIONIC" is printed in a light gray, sans-serif font on the chip's surface, preceded by the Apple logo.

 **A11**
BIONIC



0.1489
0.0026
0.0128
0.0731
0.1212
0.0933
0.0110
0.0011
0.0432
0.0002
0.0299
0.0054
0.0255
0.0035
0.1043
0.1407

= f (

	0.3200	0.5421	0.5110	0.7389	0.4918	0.9184
	0.8660	0.3020	0.4890	0.6987	0.3051	0.4029
	0.0722	0.6375	0.7953	0.1546	0.2867	0.9654
0.2222	0.6622	0.5402	0.7650	0.1721	0.3517	0.1865
0.4795	0.8597	0.4049	0.7070	0.0784	0.6631	0.5965
0.3131	0.7044	0.4241	0.7823	0.7310	0.0207	0.3071
0.0548	0.6564	0.0637	0.5374	0.1792	0.4786	0.1203
0.3202	0.4883	0.9120	0.7424	0.8177	0.8120	0.7669
0.8694	0.7283	0.8922	0.2756	0.9849	0.4665	0.8521
0.2098	0.9957	0.5271	0.7638	0.4820	0.9617	0.7875
0.2385	0.8299	0.3855	0.9500	0.3676	0.2845	0.9331
0.1923	0.7167	0.6323	0.9345	0.2605	0.0331	
0.5322	0.1652	0.4930	0.2563	0.5717	0.1103	
0.7212	0.4764	0.9196	0.6196	0.4345	0.6993	
0.8939	0.5753	0.7510	0.1955	0.7078	0.9869	
0.9766	0.7216	0.0188	0.8569	0.8033	0.7709	
0.3885	0.6761	0.4612	0.8000	0.8435	0.8812	

)

$$y = f(x)$$

Computer Vision

Image Classification

Natural Language Processing

Who is here?

What am I looking at?

How do you feel?

Context



Privacy

Performance

Personalization

File Specification

Runtime

Code as Asset

Context

Reality is **Declarative**

Machine Learning
Makes the **World**
Your Provider


```
<WorldProvider  
faceClassifier={modelPath}>
```

```
...
```

```
<WorldConsumer>  
  ({people})=>{  
    return people.map(face=>{  
      return (<PersonProvider  
person={face}>...  
      })  
    })  
  }  
</WorldConsumer>  
</WorldProvider>
```

react-native-tesseract-ocr

react-native-coreml

react-native-vision

Make the World
Your Provider

Thank You

github.com/rhdeck/chainreact-2018