

# Machine Learning and React Native

@ray\_deck

# Functions

## Written by Machines

Supervised Learning

Transfer Learning

Reinforcement Learning

Adversarial Networks

A close-up photograph of an Apple A11 Bionic chip. The chip is a square, dark grey integrated circuit mounted on a black printed circuit board. The chip's surface features the Apple logo and the text "A11 BIONIC" in a light grey, sans-serif font. The surrounding PCB is populated with various smaller components and solder points.

 **A11**  
BIONIC



Qualcomm<sup>®</sup>  
snapdragon

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

= 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
0.0101	0.7011	0.4011	0.7000	0.7010	0.0007	0.3071
0.0548	0.6564	0.0637	0.5374	0.1792	0.4786	0.3071
0.3202	0.4883	0.9120	0.7424	0.8177	0.8120	0.1203
0.8694	0.7283	0.8922	0.2756	0.9849	0.4665	0.7669
0.2098	0.9957	0.5271	0.7638	0.4820	0.9617	0.8521
0.2385	0.8299	0.3855	0.9500	0.3676	0.2845	0.7875
0.1923	0.7167	0.6323	0.9345	0.2605	0.0331	0.9331
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



```
<PeopleProvider classifiers={this.state.classifiers}>
  {/* ... */}
  <PeopleConsumer>
    ({ faces }) => {
      return faces.map(person => {
        return <PersonComponent person={person} />;
      });
    }
  </PeopleConsumer>
</PeopleProvider>
```

react-native-tesseract-ocr

react-native-coreml

react-native-vision

Make the World  
**Your** Provider

# Thank You

[github.com/rhdeck/chainreact-2018](https://github.com/rhdeck/chainreact-2018)

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