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# Automating Coffee with robotics & computer vision

Gavin Miller Dubberly Design Office

### Examples of robot arm coffee companies



**Blue Hill Coffee** 



CafeX





### MontyCafe



### Robot arm vs self-contained machine



**Costa Coffee** (previously Briggo)



**Blue Hill Coffee** 



CafeX



### MontyCafe



MontyCafe can do more than just coffee

**Coffee / Coffee Printing** Ice Cream Soft Drinks Candy **Muffins** Cocktails



**Blue Hill Coffee** 



CafeX



### MontyCafe



### Examples of robot arm coffee companies



**Blue Hill Coffee** 



CafeX





### MontyCafe







### Hot & cold cups





Mini QR codes on each object for easy identification







#### CafeX





### MontyCafe







### bluehill.coffee homepage: technology

# **TECHNOLOGY**

Our technologies enable robot baristas to learn various coffee making techniques from human baristas.



#### ROBOTICS

The robots are trained by expert human baristas using artificial intelligence to brew specialty coffee. As robots, they eliminate the risks that human contact may pose to public health.



#### **COMPUTER VISION**

We equip our robots with state-of-the-art computer vision technology to locate nearby objects, to be safe and friendly to human, and to inspect the quality of coffee.

### CLOUD

The robots draw from a suite of programs, accessible on Blue Hill's cloud infrastructure, to accomplish tasks that include grinding beans, steaming milk, and pouring latte art.

### Blue Hill Coffee Concept Diagram



**Finished Coffee** 

**Coffee Equipment** 

#### Barista Footage

## **Special thanks to** Hugh Dubberly

Presentation posted at presentations.dubberly.com/automating\_coffee