

Casey Rosenthal  
@caseyrosenthal

**NETFLIX**

**NETFLIX**



# Part One.



**SERVICE A**

**SERVICE B**

**SERVICE C**

**SERVICE D**

**SERVICE E**

**SERVICE F**

**SERVICE G**



**SERVICE A**

**SERVICE B**

**SERVICE C**

**SERVICE D**

**SERVICE E**

**SERVICE F**

**SERVICE G**



**SERVICE A**

**SERVICE B**

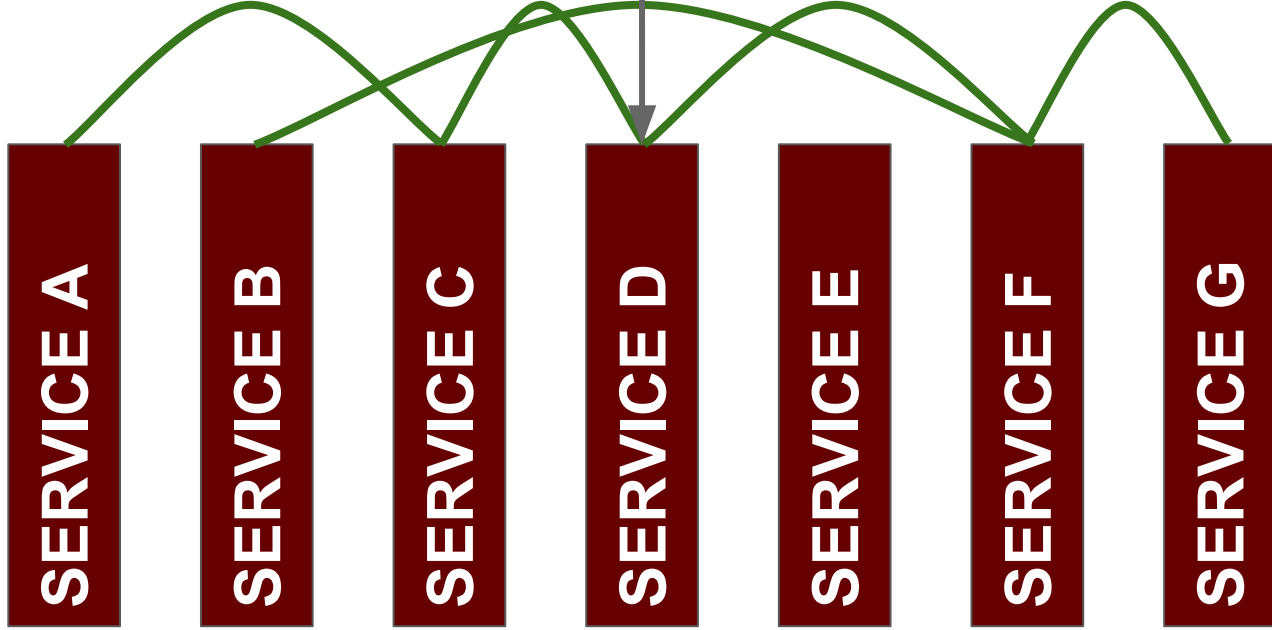
**SERVICE C**

**SERVICE D**

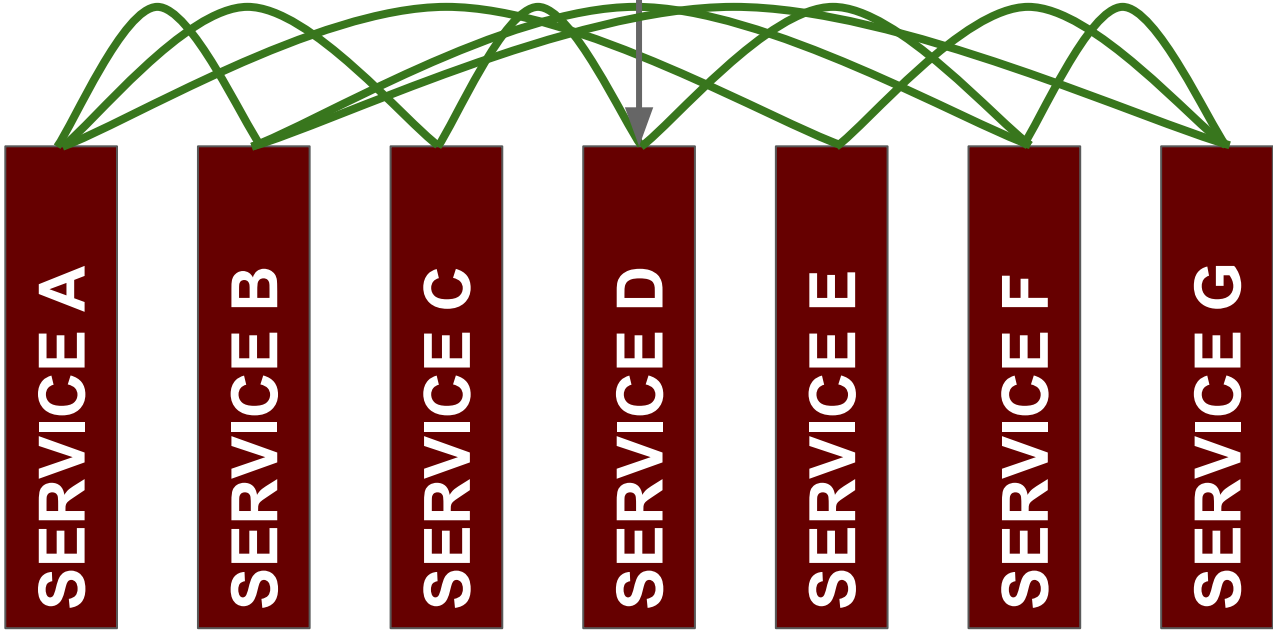
**SERVICE E**

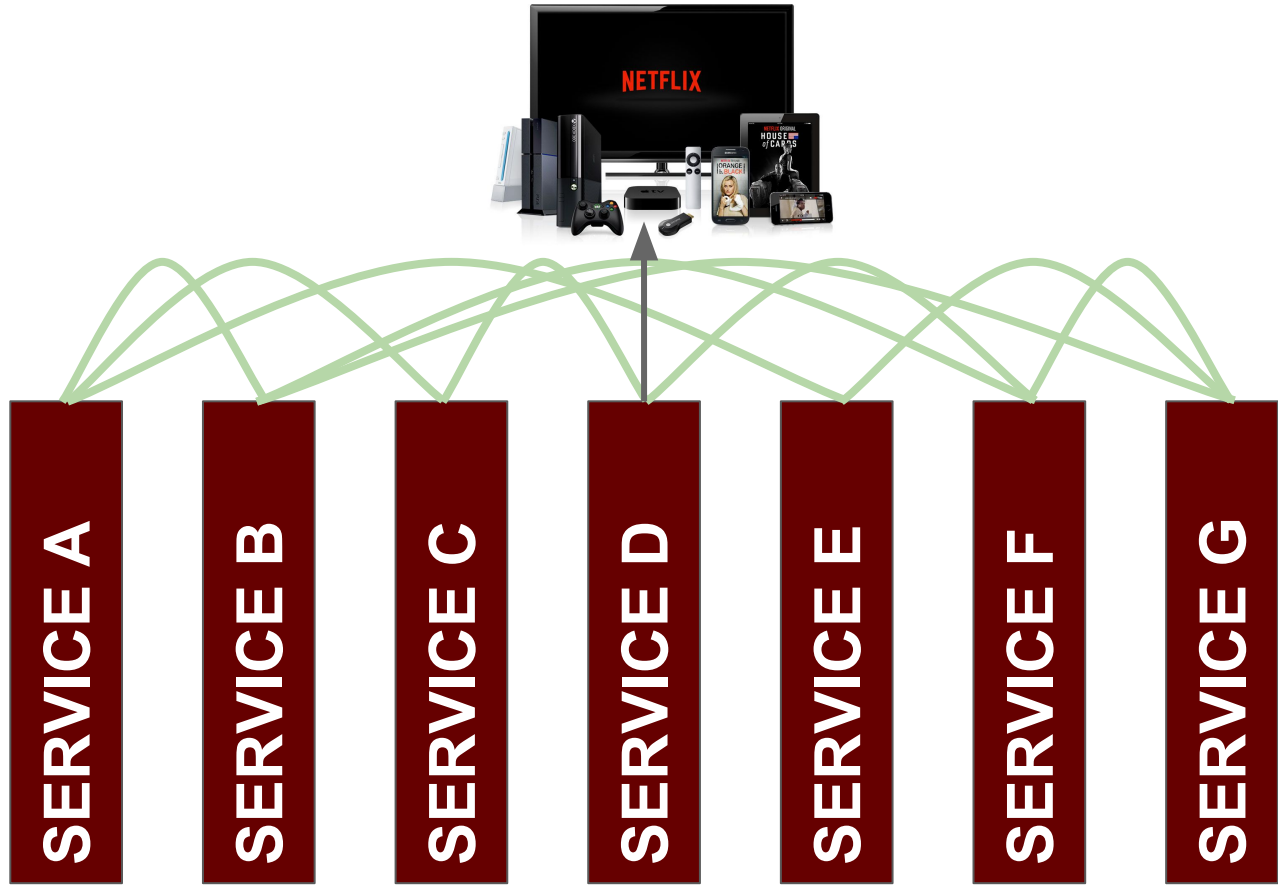
**SERVICE F**

**SERVICE G**









**PERFORMANCE**

**FAULT TOLERANCE**

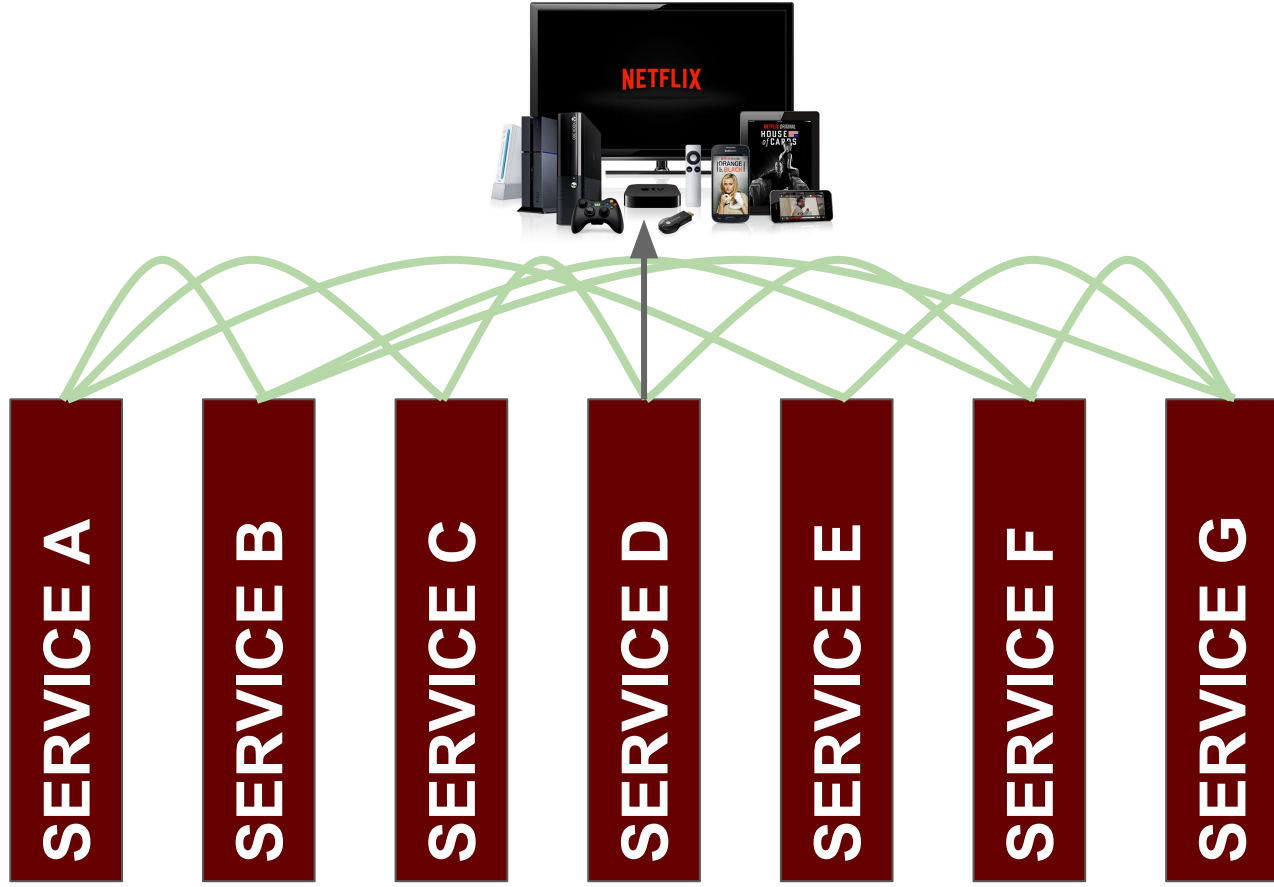
**AVAILABILITY**

# FEATURE VELOCITY

PERFORMANCE

FAULT TOLERANCE

AVAILABILITY





**Part Two.**

**Customers**

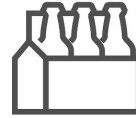




**Customers**



**Retailer**



**Customers** 

**Retailer** 

**Brewer** 

**Customers** 

**Retailer** 

**Brewer** 

<b>Demand</b>	<b>Purchased</b>	<b>In Stock</b>	<b>Remaining</b>	<b>Ordered</b>	<b>Ready for Sale</b>	<b>Being Bottled</b>
1	1	2	1	1	8	1

**Customers** 

**Retailer** 

**Brewer** 

Demand	Purchased	In Stock	Remaining	Ordered	Ready for Sale	Being Bottled
1	1	2	1	1	8	1
4	2	2	-2	4	8	5

**Customers** 

**Retailer** 

**Brewer** 

Demand	Purchased	In Stock	Remaining	Ordered	Ready for Sale	Being Bottled
1	1	2	1	1	8	1
4	2	2	-2	5	8	6
64	5	5	-59	65	11	250

**Customers** 

**Retailer** 

**Brewer** 

Demand	Purchased	In Stock	Remaining	Ordered	Ready for Sale	Being Bottled
1	1	2	1	1	8	1
4	2	2	-2	5	8	6
64	5	5	-59	65	11	250
3	3	11	8	0	250	0

**Customers** 

**Retailer** 

**Brewer** 

Demand	Purchased	In Stock	Remaining	Ordered	Ready for Sale	Being Bottled
1	1	2	1	1	8	1
4	2	2	-2	5	8	6
64	5	5	-59	65	11	250
3	3	11	8	0	250	0
1	1	62	61	0	196	0

# Customers

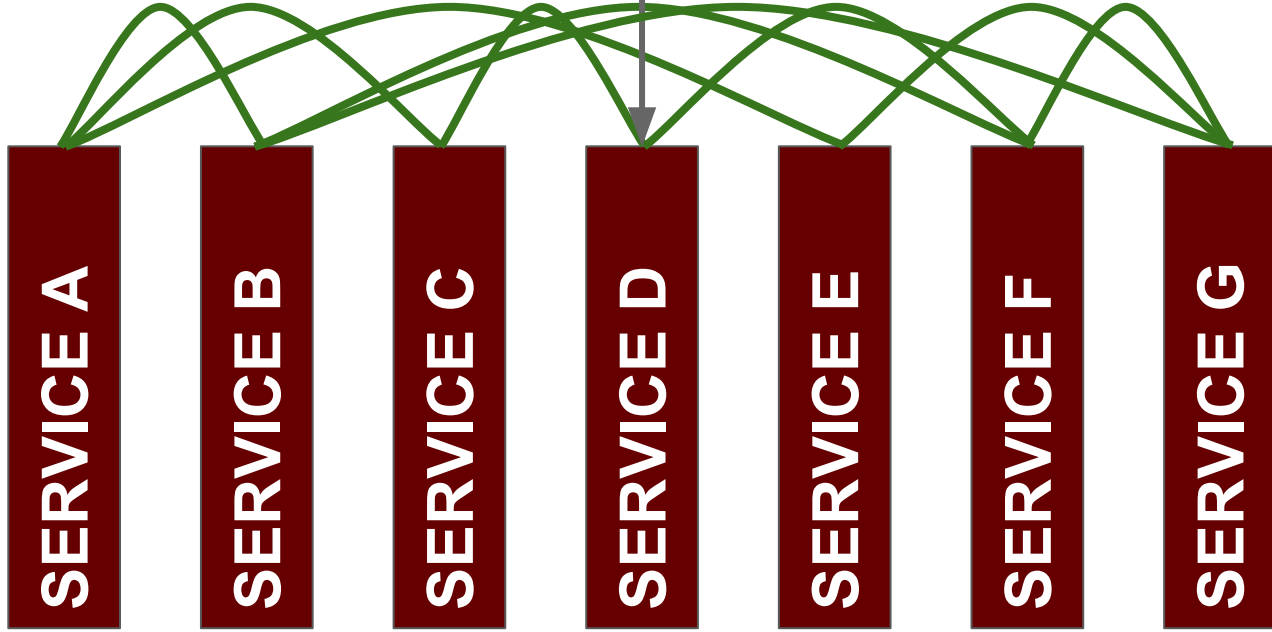
# Retailer

# Brewer

Demand	Purchased	In Stock	Remaining	Ordered	Ready for Sale	Being Bottled
1	1	2	1	1	8	1
4	2	2	-2	5	8	6
64	5	5	-59	65	11	250
3	3	11	8	0	250	0
1	1	62	61	0	196	0
		<b>62</b>	<b>-61</b>		<b>196</b>	<i>distillery?</i>





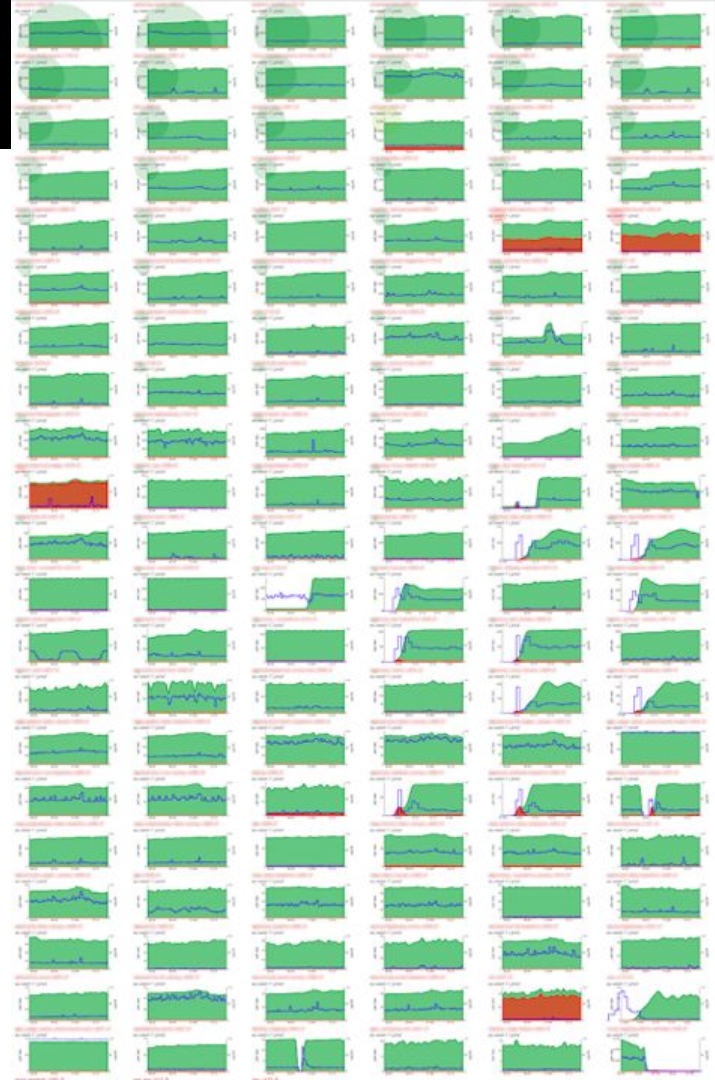


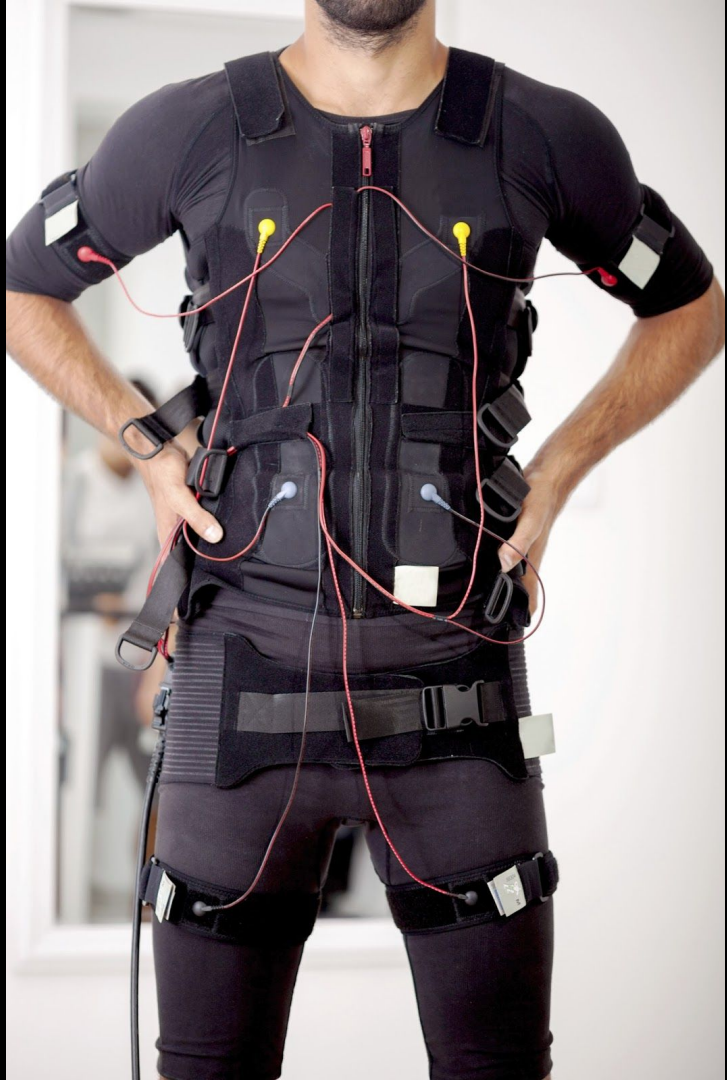


# Part Three.

# Intuition Engineering

# Intuition Engineering





# Intuition Engineering



**VIZCERAL**



# Intuition Engineering



**VIZCERAL**

<https://github.com/Netflix/vizceral>

<https://github.com/Netflix/vizceral>

- **Proof of Concept**

<https://github.com/Netflix/vizceral>

- Proof of Concept
- **Demo**

# <https://github.com/Netflix/vizceral>

- Proof of Concept
- Demo
- **Tech**

# <https://github.com/Netflix/vizceral>

- Proof of Concept
- Demo
- Tech
- **Example App**

# <https://github.com/Netflix/vizceral>

- Proof of Concept
- Demo
- Tech
- Example App
- **Future Work**

<https://github.com/Netflix/vizceral>

- **Proof of Concept**
- **Demo**
- **Tech**
- **Example App**
- **Future Work**





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# Part Four.

# Beyond Vision

# Beyond Vision

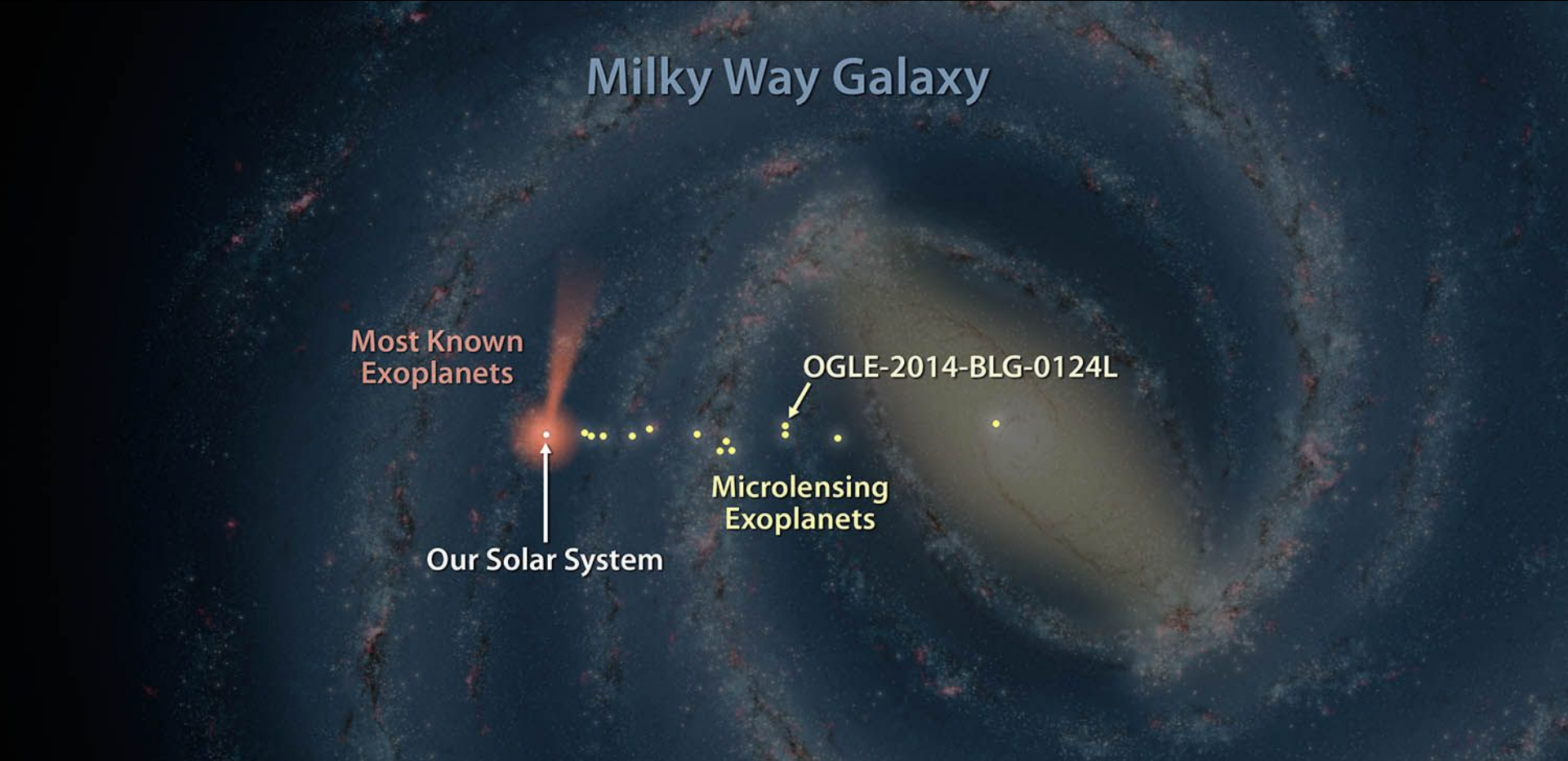
Milky Way Galaxy

Most Known  
Exoplanets

OGLE-2014-BLG-0124L

Microlensing  
Exoplanets

Our Solar System



# Beyond Vision



# Beyond Vision


← → ↻ <https://www.scientificamerican.com/article/device-lets-blind-see-with-tongues/> ☆ 99 📧 📧 📧 📧 📧

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## A pair of sunglasses wired to an electric "lollipop" helps the visually impaired regain optical sensations via a different pathway

By Mandy Kendrick on August 13, 2009 32



The image shows a woman with long brown hair wearing dark sunglasses. She is holding a smartphone in her right hand, which is connected to a small, round, lollipop-shaped device in her mouth. The device is connected to a thin wire that goes behind her ear. The background is a plain, light-colored wall.

# Beyond Vision

← → ↻ <https://www.newscientist.com/article/2111371-face-electrodes-let-you-taste-and-chew-in-virtual-reality/> ☆ 99 🗨️ 📧 ☰

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DAILY NEWS 4 November 2016, updated 4 November 2016

## Face electrodes let you taste and chew in virtual reality

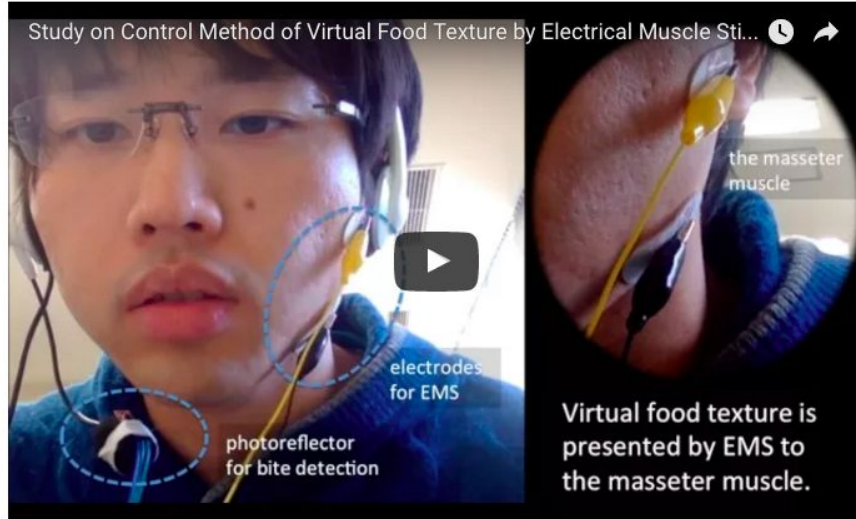


A close-up photograph of a person's mouth and nose. They are holding a transparent, rectangular electronic device in front of their mouth. The device has a black front panel with a grid of circular ports. Several colored wires (red, yellow, black) are connected to these ports. The person's tongue is touching the device, and their lips are slightly parted. The background is a plain, light color.



# Beyond Vision

In an initial trial, it worked for about half of participants. Some also reported a sensation of spiciness when the device was warmer (around 35 °C) and a minty taste when it was cooler (18 °C). Ranasinghe and Do envisage such a system embedded in a glass or mug to make low-sugar drinks taste sweeter.



Your taste receptors may be open to electrical manipulation, but food isn't just about taste – texture is every bit as important. This week, a team from the University of Tokyo presented a device that uses electricity to [simulate the experience of chewing foods of different textures](#). Arinobu Niijima and [Takefumi Ogawa](#)'s Electric Food Texture System also uses electrodes, but not on the tongue, instead they place them on the masseter muscle – a muscle in the jaw used for chewing – to give sensations of



# Intuition Engineering

- **System Aspect > Quantitative Data**

# Intuition Engineering

- System Aspect > Quantitative Data
- **Create New Senses**

# Intuition Engineering

- System Aspect > Quantitative Data
- Create New Senses
- **Don't Limit to Software**

# Intuition Engineering

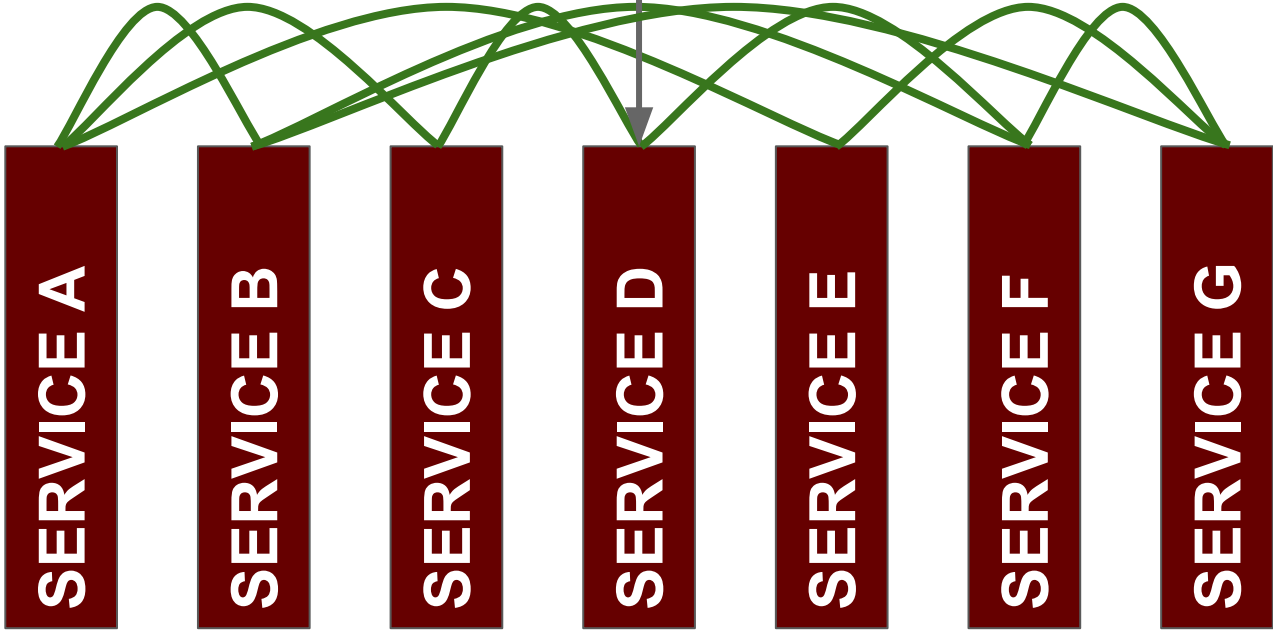
- System Aspect > Quantitative Data
- Create New Senses
- Don't Limit to Software
- **Useful > Interesting**

# Intuition Engineering

- System Aspect > Quantitative Data
- Create New Senses
- Don't Limit to Software
- Useful > Interesting
- **Race against Machine Learning**

# Intuition Engineering

- **System Aspect > Quantitative Data**
- **Create New Senses**
- **Don't Limit to Software**
- **Useful > Interesting**
- **Race against Machine Learning**



**SERVICE A**

**SERVICE B**

**SERVICE C**

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**SERVICE G**

**Ward Cunningham**

**New Relic**

**<http://bl.ocks.org/WardCunningham/5861122>**



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