

# Prototyping

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# Software projects

## Initial market validation

**Object Capture**

Circle the object you want to capture

With advanced speaker design and powered bass™ technology, Beats deliver on the power, clarity, and deep bass that DJ's, artists and producers want you to hear. Step into the studio—presenting Beats™ by Dr. Dre™.

MONSTER studio. High Definition Powered Headphones™ Headphones

**Tag Options**

SONY Tag Options

- Edit
- Add to Collection
- Share
- Delete

Description text goes here and can include voice recording, links, photos, and videos

[voice recording]

[video]

Website to learn more info: [sony.com/headphones](http://sony.com/headphones)

DOWNLOAD APP

**Add to Collection**

Sony headphones

	New Collection
	All Tags 32
	headphones 1
	name 8
	name 5
	name 1

# Software Projects

## UI/UX Prototyping

Square Space

<https://www.squarespace.com/>

Sketch

<https://www.sketchapp.com/>

Figma

<https://www.figma.com/>

## Software development

GitHub for students

<https://education.github.com/pack> (incluindo Atom, AWS, Cart, Stripe, Unreal)

## Help

Amazon Mechanical Turk

<https://www.mturk.com/>

# Augmented reality

## Open source augmented reality SDKs



# Augmented reality

## Tracking Specialties

There are four main tracking specialties — plane tracking, SLAM/Markerless tracking, face tracking, and object recognition.

Plane tracking



SLAM aka markerless tracking



Face tracking



Object recognition



[Augmented reality SDKs comprehensive guide](#)

# Augmented reality

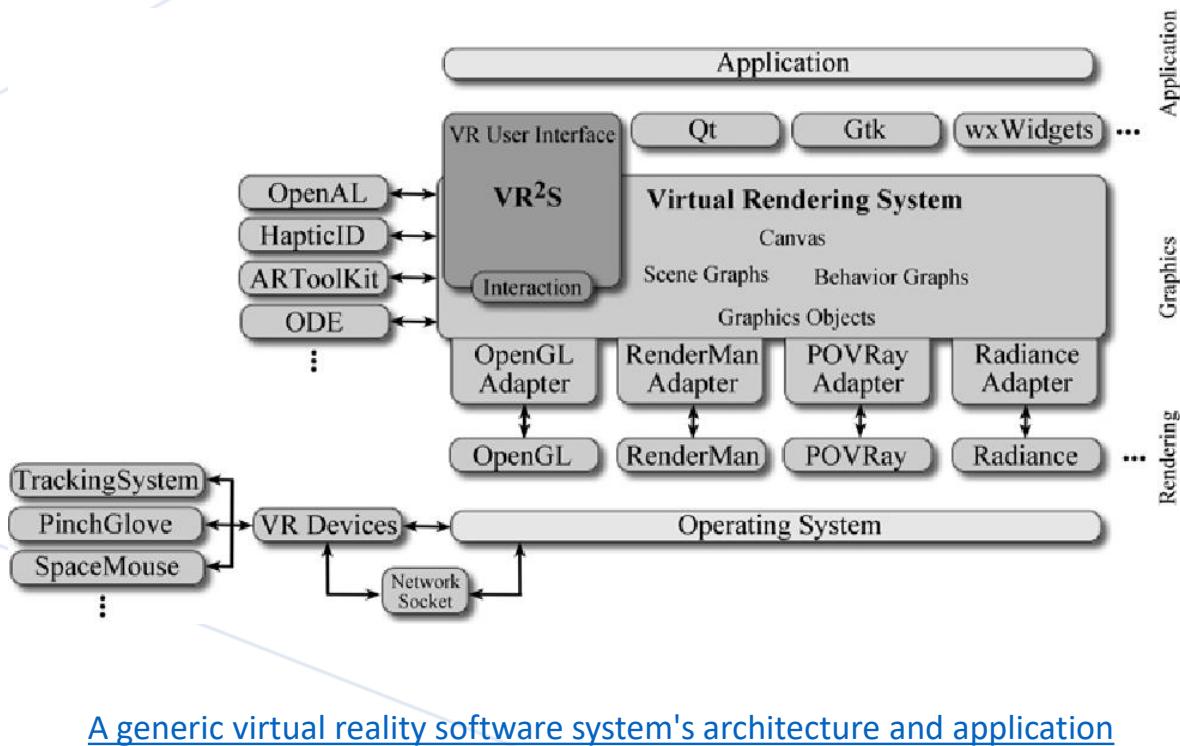
## Augmented Reality SDKs Reviewed

There are dozens of Augmented Reality SDKs, but that doesn't mean they all solve every problem. To help you find the one that is right for you, we have put together an overview of the best, most mature AR SDKs currently on the market. They are listed in alphabetical order.

Amazon Sumerian	
ARCore	
ARKit	
ARToolKit and artoolkitX	
DeepAR	
EasyAR	
Lumin SDK (for Magic Leap)	
MAXST AR SDK	
Marxent AR SDK with MxT Tracking	
Visual Studio	
Vuforia	
Wikitude	

[Augmented reality SDKs comprehensive guide](#)

# Virtual reality



# Virtual reality

## Best virtual reality SDks tools

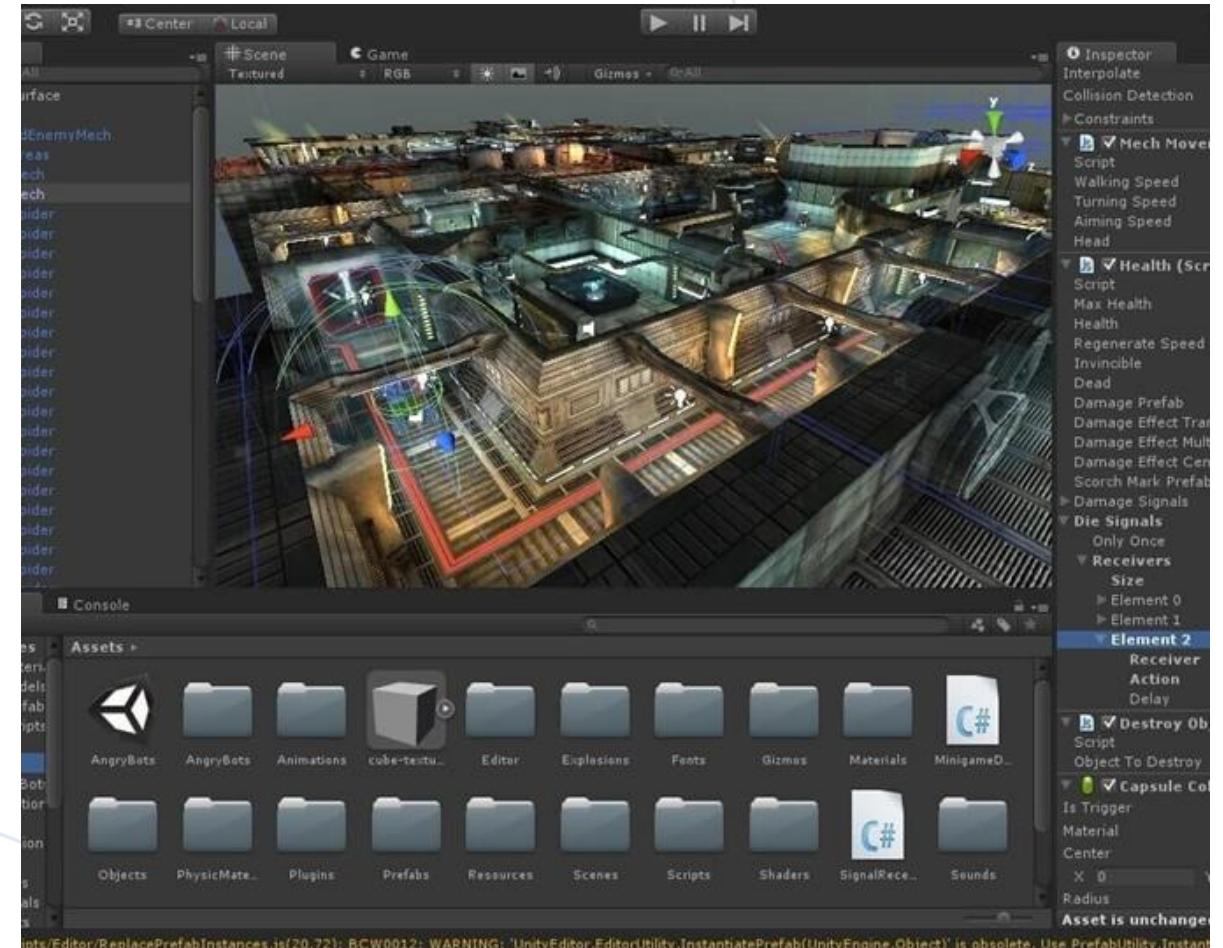
Unity 3D

Unreal Engine

Blender

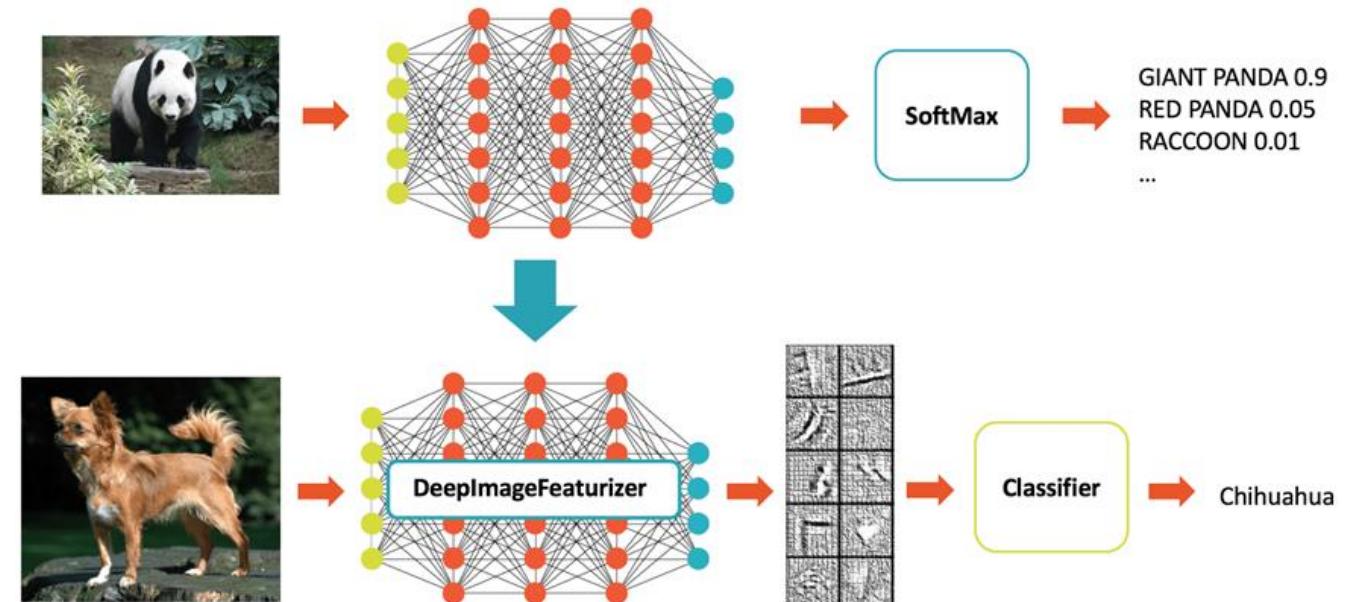
Amazon Luminary

Cry Engine



# Machine Learning

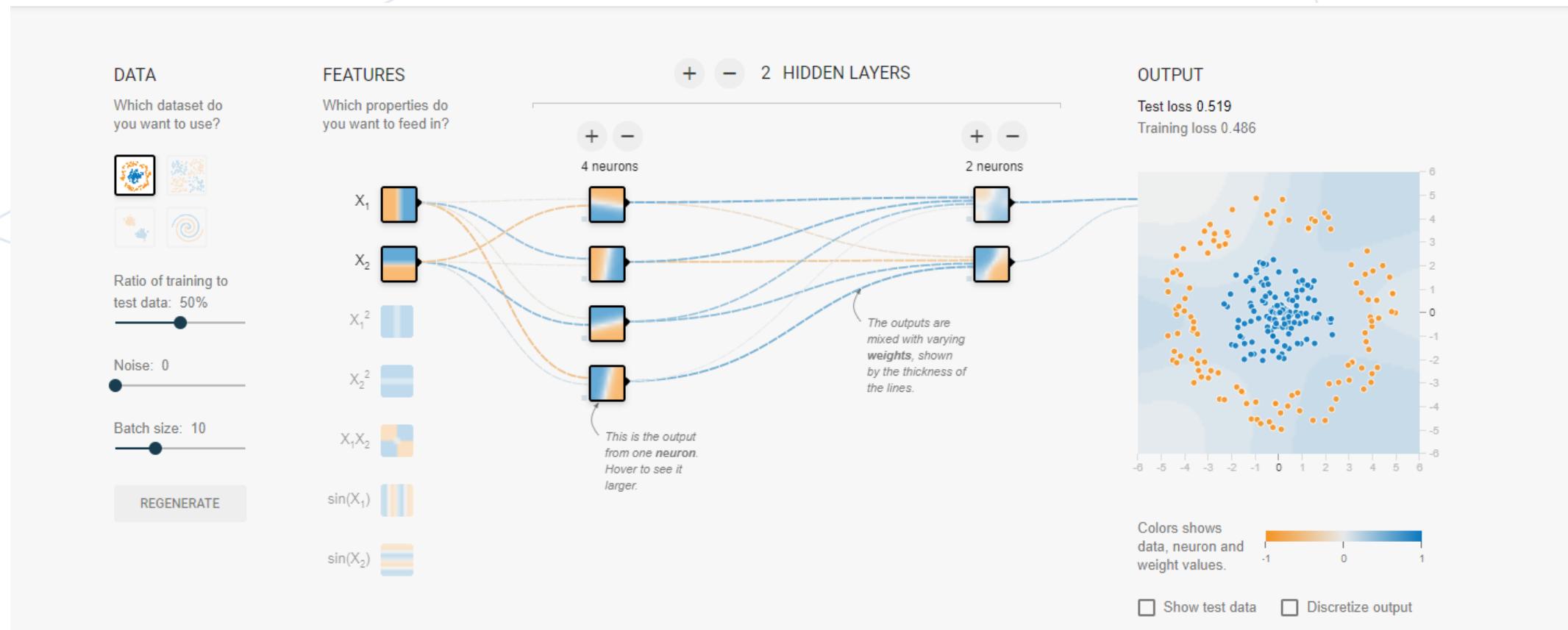
## Open source tools for machine learning



# Machine Learning

## Tensor Flow

### Playground with Tensor Flow



## Hardware projects

<https://www.codementor.io/blog/MVP-product-market-fit-2lvrzn68b2>

Market validation

Proof of concept

Prototype

“Minimum Viable Product”  
(MVP)



# Hardware projects

Development of physical prototypes

<https://predictabledesigns.com/how-to-prototype-hardware-product/>

Arduino

<https://www.arduino.cc/>

Raspberry Pi

<https://www.raspberrypi.org/>

Sensors

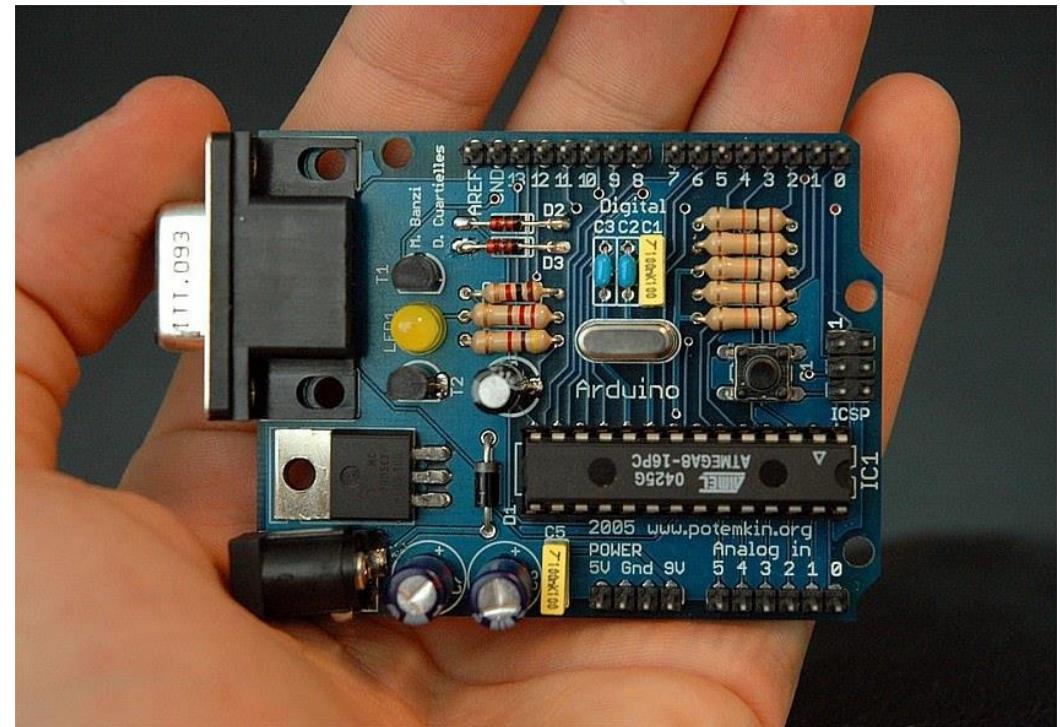
<https://www.sparkfun.com/>

Blender (modelação 3D)

<https://www.blender.org/>

3D Printing

<https://www.3dhubs.com/>



## Hardware projects

Help

Mechanical engineering

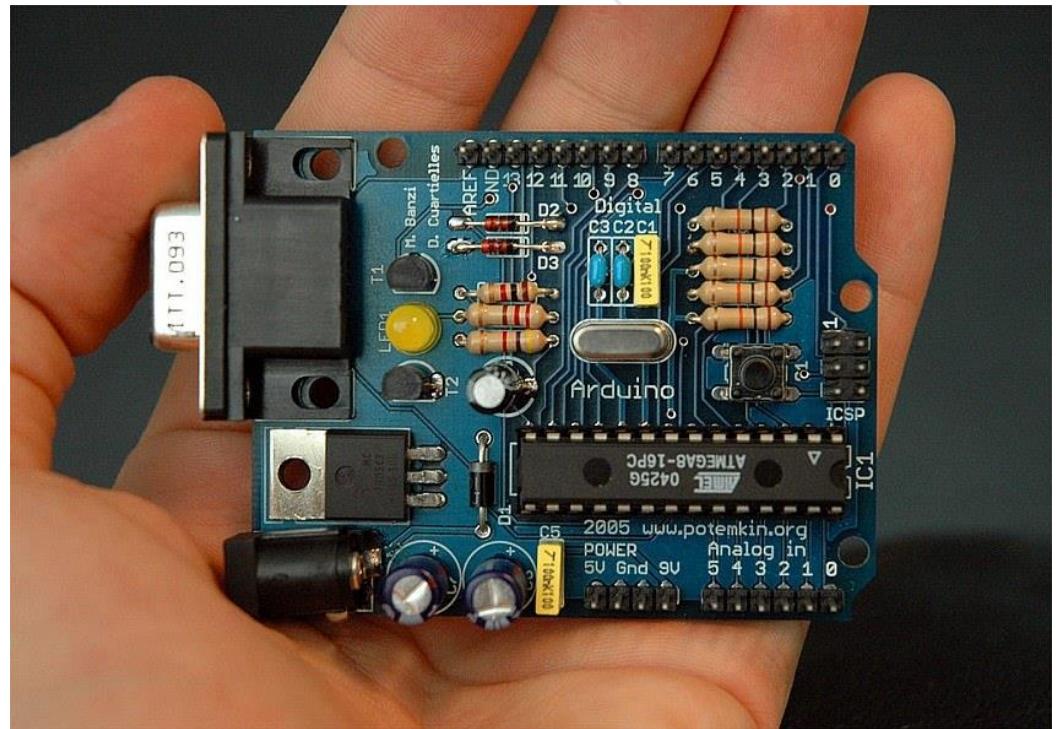
Grabcad

<https://grabcad.com/>

Electrical engineering

Instructables

<https://www.instructables.com/>



## Interviews

<https://www.youtube.com/watch?v=Xj8Zu8wuCNs>

“procurement” by Francisco Mendes (Hardware City)

<https://www.youtube.com/watch?v=CQYfz8Zf1ik>

Prototyping by Francisco Mendes and Sofia Almeida (Line Health)

# Prototyping

“Software”

<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-831-user-interface-design-and-implementation-spring-2011/syllabus/>

“Hardware”

<https://ocw.mit.edu/courses/sloan-school-of-management/15-783j-product-design-and-development-spring-2006/syllabus/>

## Additional "Links"

[Comparison of software prototyping tools](#)

<https://docs.particle.io/guide/how-to-build-a-product/intro/>

[Lean startup](#)

[Bresslergroup](#) (innovation laboratory for product development)

[Highway1](#) (“hardware startup accelerator”)

[Altitude](#) (“rapid prototyping”)

# Leituras adicionais

David Wallace, Toy Product Design, 2008 (<https://ocw.mit.edu/courses/mechanical-engineering/2-00b-toy-product-design-spring-2008/index.htm>)

Neil Gershenfeld, How to Make Almost Anything, 2012 (<http://ocw.mit.edu/courses/media-arts-and-sciences/mas-863-how-to-make-almost-anything-fall-2002/>)

Olivier de Wek, Engineering Design and Rapid Prototyping, (<https://ocw.mit.edu/courses/aeronautics-and-astronautics/16-810-engineering-design-and-rapid-prototyping-january-iap-2007/index.htm>)

Ted Selker, Industrial Design: A Cognitive Approach, 2003 (<https://ocw.mit.edu/courses/media-arts-and-sciences/mas-742-industrial-design-intelligence-a-cognitive-approach-to-engineering-fall-2003/index.htm>)

Printoo Kickstarter video

<https://vimeo.com/92845728>



Printoo Kickstarter video

7 years ago | More

