

Maker Instructional Design for Next Generation

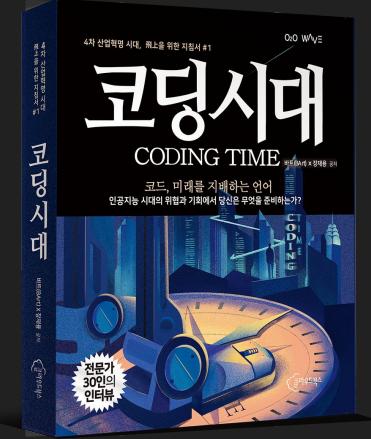
장재용

Nov 26, 2020

GEN (prev. LTLABS)

My History

- GEN 대표
- 자연어처리 기술 컨설턴트
- 웹서버 관리자
- 특허 기술번역
- 케냐, 말라위*
- 고려대학교



The purpose of my research is to **study of learning effect and satisfaction degree from maker education of e-learning** not like conventionally learning at the school class.

Many people consider the Maker education instruction should be implemented at the physical spaces like the makerspace or fablab. By the way we see some cases are open online tutoring or class for Maker education under COVID-19 situation. But it's not systematically organized.

Using TinkerCAD, I will offer 3D printing Maker Education. Not only 3D modeling and printing, I want to make more studies of IoT and others using the circuits simulation of TinkerCAD.

Maker education offers a transformational approach to teaching and learning that attends to the real and relevant needs of learners and humans.

It is an approach that positions agency and student interest at the center, asking students to become more aware of the design of the world around them, and begin to see themselves as people who can tinker, hack and improve that design.

Maker education is fundamentally about approaches, mindsets, and community – not about stuff – and Maker Ed's focus on educators and the institutions they work in emerges from our core belief that maker education is about people. We know that people need support, tools, resources and community to fully participate in the opportunities offered.

*Source: <https://makered.org/about/what-is-maker-education/>

Future Education:
“Creative skills for
solving problems =
Maker Education”

“HOW . . . ”

———— Linus Torvalds ————

Most good programmers
do programming not
because they expect to
get paid or get adulation
by the public, but because
it is fun to program.

———— From Weblify with ❤ ————

“FUN”

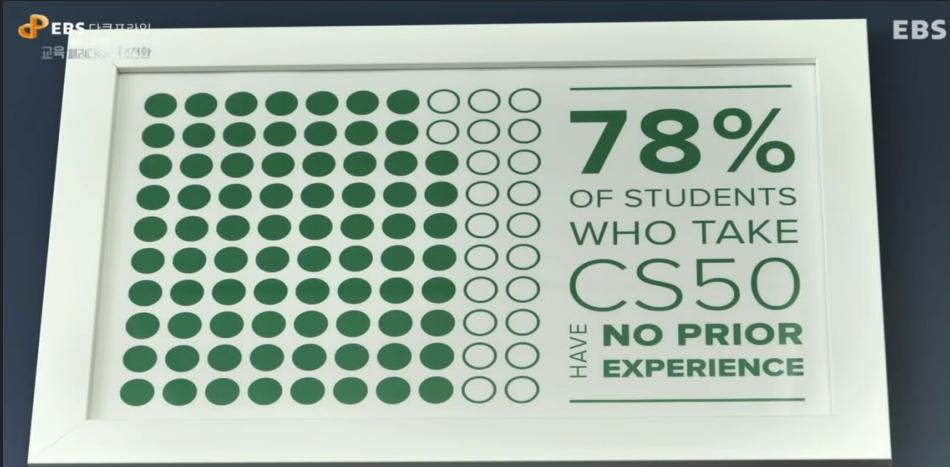


<https://www.zdnet.com/article/linus-torvalds-offers-a-peek-at-his-messy-office-and-zombie-shuffling-desk/>





[실리콘밸리가 얼마나 빠르게 변화하고 있는지 알고 있다면
졸업 후에는 새로운 분야를 빨리 배울 수 있는 능력이 중요합니다]

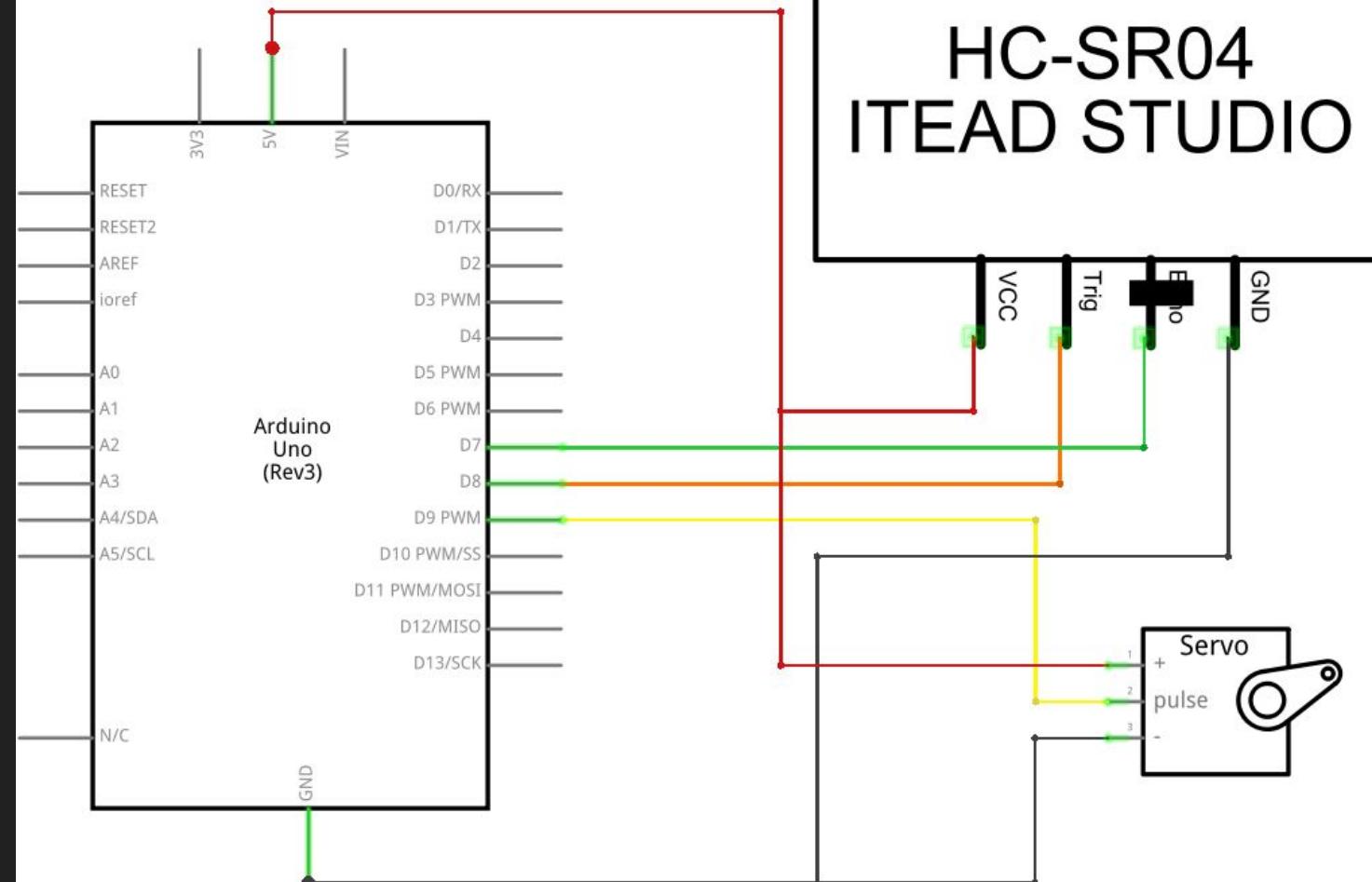


“FUN MAKER”

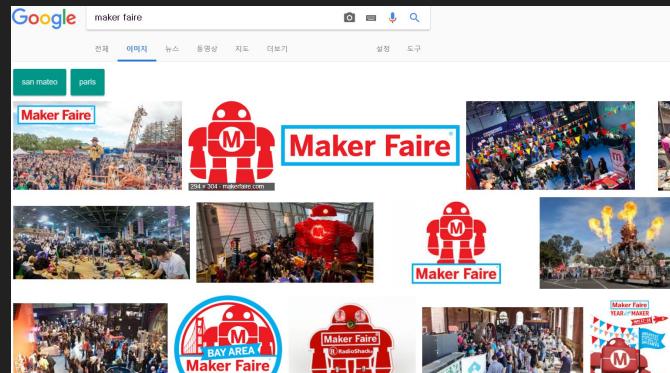


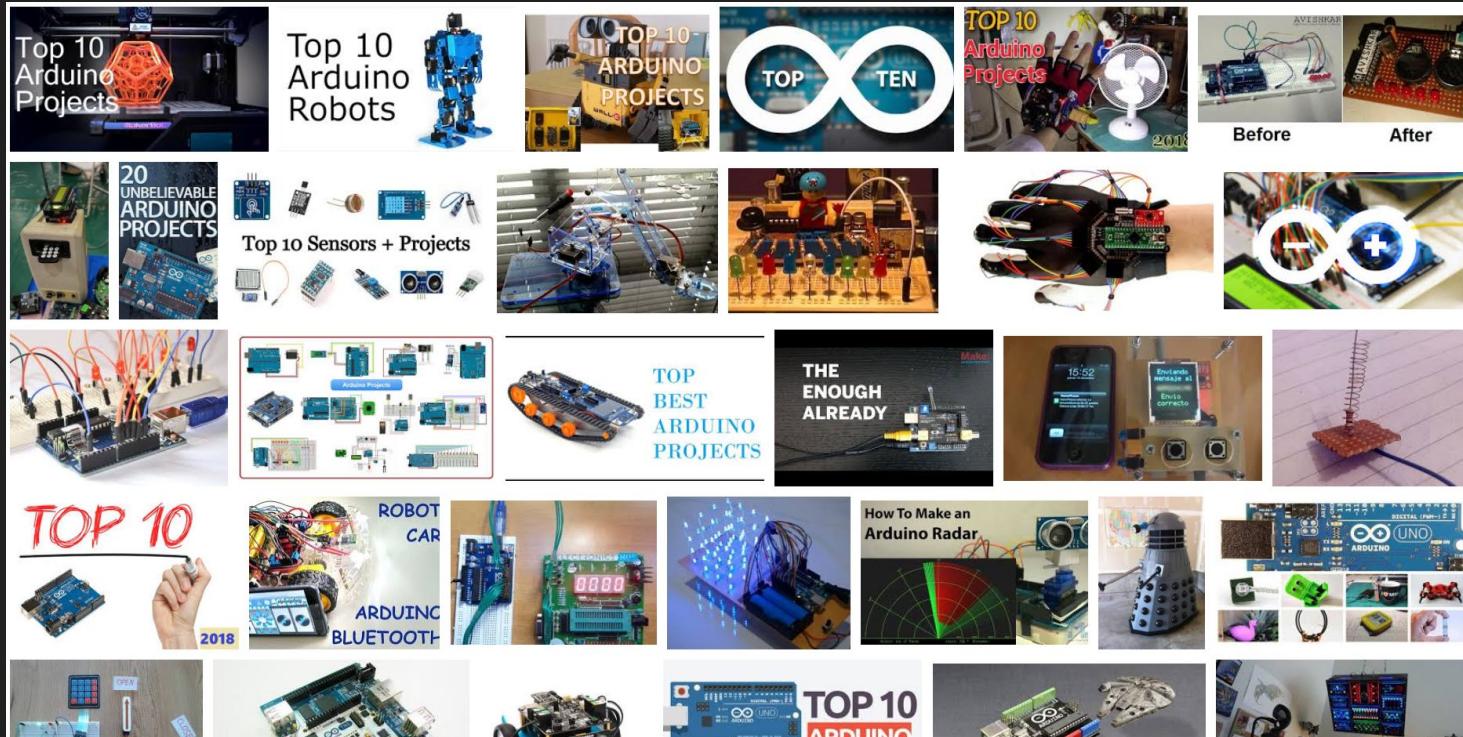
OpenTrash
Can. 

HC-SR04 ITEAD STUDIO



fritzing





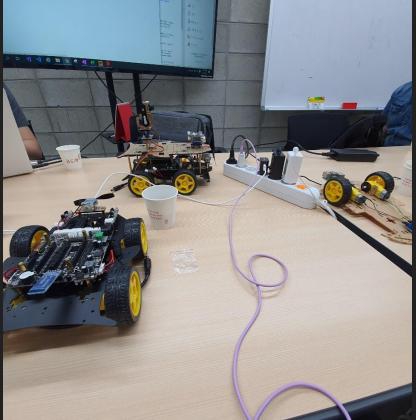
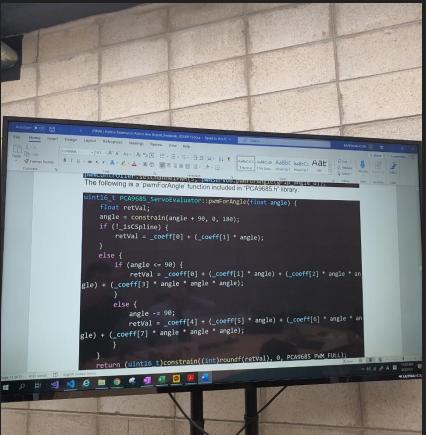
Just Googling “arduino top 10 project”

Opensource Hardware on Arduino

How? Why?

Arduino the Documentary (2011)

<https://www.imdb.com/title/tt1869268/>



ITEC

사업 충전 분야

그레이트 커머스
영어 영상 번역
Google Translate

ITEC
development



새로운 도전 기회 및 혁신을 개발하여 신제품이 필요
할 때 시장에서 차별화된 특성을 갖는다. 새로운
방법을 막을 수 있습니다. ITEC의 역사와 발전하고 지
속적으로 개발에 집중하십시오.

ITEC
training



단기 여행에서 국제 대회 및 회의 모임의 경우
모든 것을 보여드립니다. 우리는 시설을 수 있는 국제 힐링 및
체육관과 산자리를 찾기 위해 적합한 장소를 찾을 수 있는 분들
모여 지역 사회의 요구를 충족하는 새로운 기술을 가

ITEC
equipping

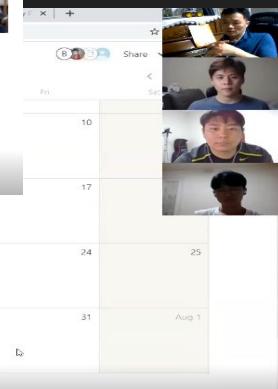


대회에는 모든 시설에 대한 보조 체육관입니다. 미래 품질
2018.2.20. 미리보기 대회 대회 및 경기의 일정
을 미리보기 대회 관람이 있는 미리보기 대회 및 경기의 일정
들에게 업데이트하고, 단체를 제공하고, 연도하고, 같은



Via Cooking #1
Pages from Food Sorceress, Rupama, of Cookery

₩14,000
₩99,000



Learn Low Sodium Cooking Tips & Recipes for Breakfast!



Learn how to cook bacon, sausage, hash browns, and your other favorites.

Judy Craft
4.8 ★★★★★ (9)
총 2시간 • 22개의 강의 • 모든 수준



Cook Paella and Valencian Rice like a Master Chef
Learn to cook and perfect your paellas as a master, with the help of one of the best chefs in Valencia.

Jenny Segal
4.8 ★★★★★ (21)
총 4.5시간 • 46개의 강의 • 모든 수준

₩14,000
₩22,000

날짜/간접 상세기	내일 DeepDiscount	온 프로젝트 목표 설정...	온 프로젝트 계획서 제출	온 프로젝트 준비를 구매	날짜	날짜
19	20	21	22	23	24	25
26	27	28	29	30	31	Aug 1
프로젝트 18일 오후 11:59						

Meeting Notes List View

Makers Make Innovation

THE MAKER MOVEMENT

A TIMELINE OF KEY MODERN EVENTS

JAN 2005 First issue of MAKE magazine, a publication devoted to DIY projects, hits newsstands.

JUN 2005 Etsy launches, providing an online platform for artisans to sell their crafts.

APR 2006 The Bay Area hosts the first Maker Faire, a public annual event celebrating the arts, crafts, engineering, science projects and the DIY community.

OCT 2006 The first TechShop opens in Menlo Park, California.

FEB 2009 Square, Inc., launches, providing crafters and artisans a vehicle to collect credit card payments directly from customers.

APR 2009 MakerBot, one of the first desktop 3D printers, is available for sale.

APR 2009 Kickstarter is formed and entrepreneurs begin to raise capital via crowdfunding.

MAR 2011 South-by-Southwest (SXSW) celebrates the 25th year of convening musicians, artists, and tech junkies in Austin, Texas.

SEP 2012 The New York Times reports that the "Made in America" label is regaining popularity, with more consumers buying domestic, local goods they feel represent "old-school craftsmanship, even luxury."

JAN 2013 The Maker Manifesto: Rules for Innovation in the New World of Crafters, Hackers, and Tinkerers, written by TechShop CEO Mark Hatch, is published.

MAY 2013 President Obama announces the National Network for Manufacturing Innovation (NNMI), a collaboration between manufacturers and academia to problem-solve and help advance the manufacturing industry.

MAY 2014 The White House launches Mayors Maker Challenge to encourage support of Makers at the local level, and hosts the first-ever White House Maker Faire.

FEB 2015 Raspberry Pi, a computer the size of a credit card and as inexpensive as \$5, reached five million units in sales.

MADE IN USA

Square

Etsy

MakerBot

South-by-Southwest (SXSW)

The New York Times

The Maker Manifesto: Rules for Innovation in the New World of Crafters, Hackers, and Tinkerers

President Obama

Raspberry Pi

NATIONAL LEAGUE of CITIES

“Pro Maker”

Eric Stackpole David Lang



1,324명
\$815,601
크라우드펀딩

<https://www.kickstarter.com/projects/openrov/openrov-trident-an-underwater-drone-for-everyone>

Erin Gentry

239명

\$35,319

크라우드펀딩



<https://www.kickstarter.com/projects/openscience/biocurious-a-hackerspace-for-biotech-the-community>

Palmer Luckey

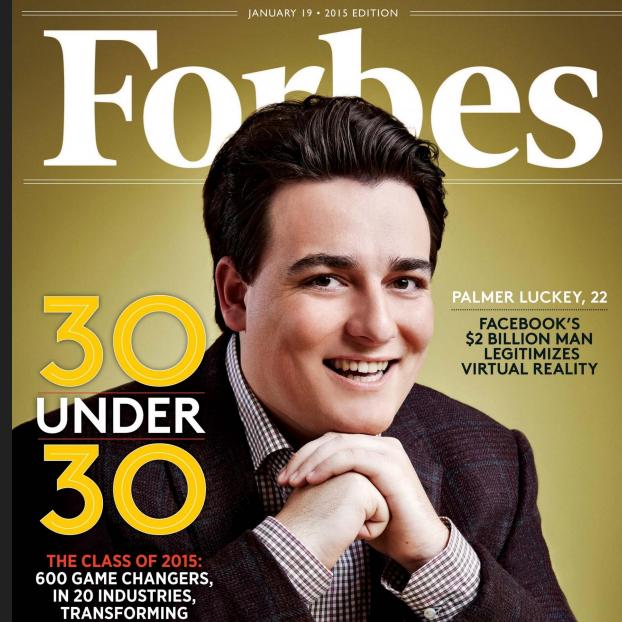
9,522 명

\$2,437,429

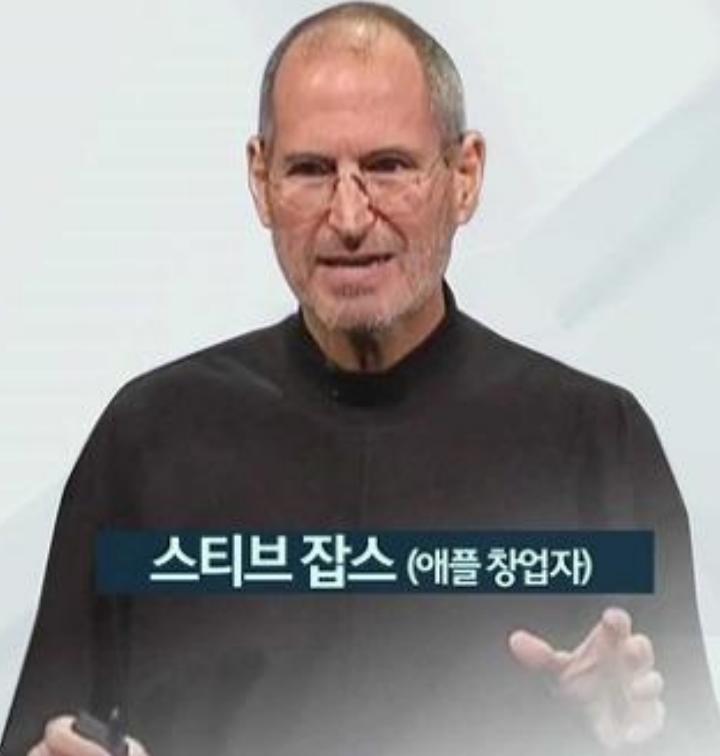
크라우펀딩

성공

2012년



<https://www.kickstarter.com/projects/1523379957/oculus-rift-step-into-the-game>



“이 나라 모든 사람들은
코딩을 배워야 합니다.
코딩은 생각하는 방법을
가르쳐 줍니다.”

스티브 잡스 (애플 창업자)

“비디오 게임을 사지만 말고
직접 만드세요.
휴대폰을 갖고 놀지만 말고
프로그램을 만드세요.”



버락 오바마 (미국 대통령)

Баярлалаа
спасибо
hvala
dankt
dziekuje
obrigado

enkosí

raхмат
faafetai lava
kiitos dankie
dhamayavat
kostnom

vinaka
спасибі
blagodaram

акын dankon ačılı
chnorakaloutioun

sobodi
mesi
di mesda
kam sah hamniða

dékui
najis tuke
rahmet

danke
merci

謝謝
спасибі
spas

welalin tæk
dank je
misaotra
matondo

grazzi
maldoo

tesekkür ederim
gracias
tapadhi lat

хвала
asante manana
obrigada
tenki

gracias
mochchakkeram
mamnun

дэлкуло
go raibh maith agat
arigatō takk
dakujem trugarez

merci

감사합니다
xièxie
euxkapiotra
diolch
shukriya
mercs

ngiyabonga
thank you
sukriya kop khun krap
terima kasih
감사합니다
rahmet

ariagatō takk
dakujem trugarez

For the best solution on future tech education,
lecture, consulting, & others

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