

# Sanat ve Tasarım İşlerinde Mikro Denetleyiciler ve Yaratıcı Kodlama

Alp Tuğan

Giriş →



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αλπ τυγαν

Algoritmik Sanat

Skeç ve Projeler → Instagram & alptugan.com

Müzik & Ses

RAW → A/V Canlı Kodlama

Akademi

Özyegin Üniversitesi → İletişim Tasarımı  
(2015...)

# Skeç, Projeler, Açık Kaynak



p5.js

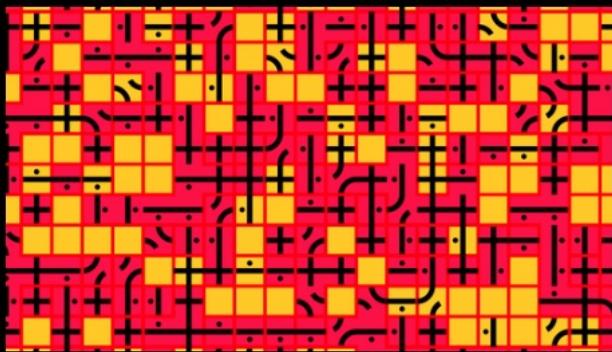
OF

RAW



Spotify

# Ozyegin Üniversitesi: RandomSeed *new semestre: 2022 Fall*



W10\_Melis\_Gür  
COD207, 2022\_FALL



W07\_Burcu\_Kekeç  
COD207, 2021\_FALL



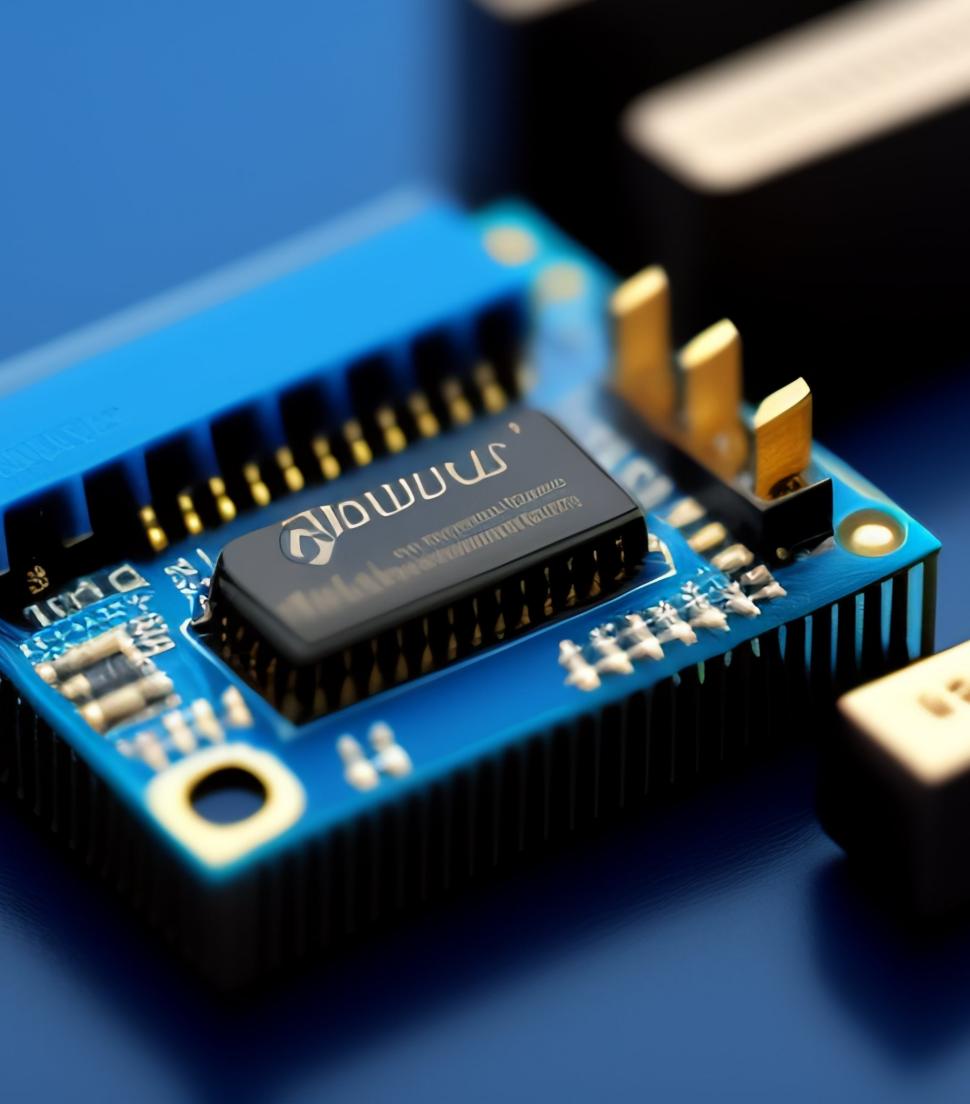
W07\_Derin\_Bükücü  
COD207, 2021\_FALL





# Yaratıcı Kodlama?

Yazılım ve teknolojik donanımları deneysel yöntemlerle kullanma pratiklerini içeren disiplinler arası bir alan olarak özetlenebilir.



# Mikro-Denetleyiciler ve Fiziksel Veri İşleme (Physical Computing)

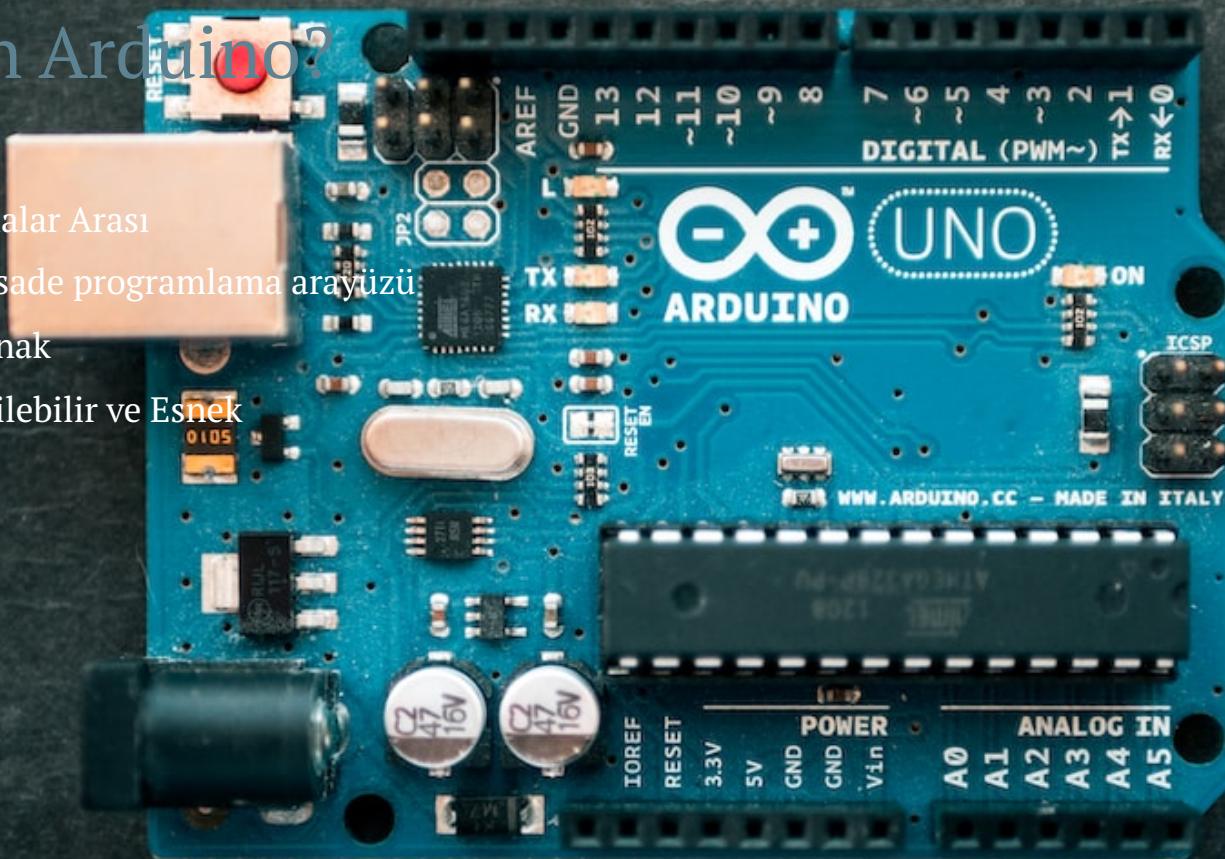
- Mikro-denetleyiciler; Elektronik projelerde kullanılabilen küçük ancak işlevsel cihazlardır.
- Fiziksel Veri İşleme; Yazılım ve teknolojik donanımlar vasıtasıyla, analog dünyadaki olgularını sayısal veriye dönüştürme işlemidir.

# Ivrea Interaction Design Institute, ITALY

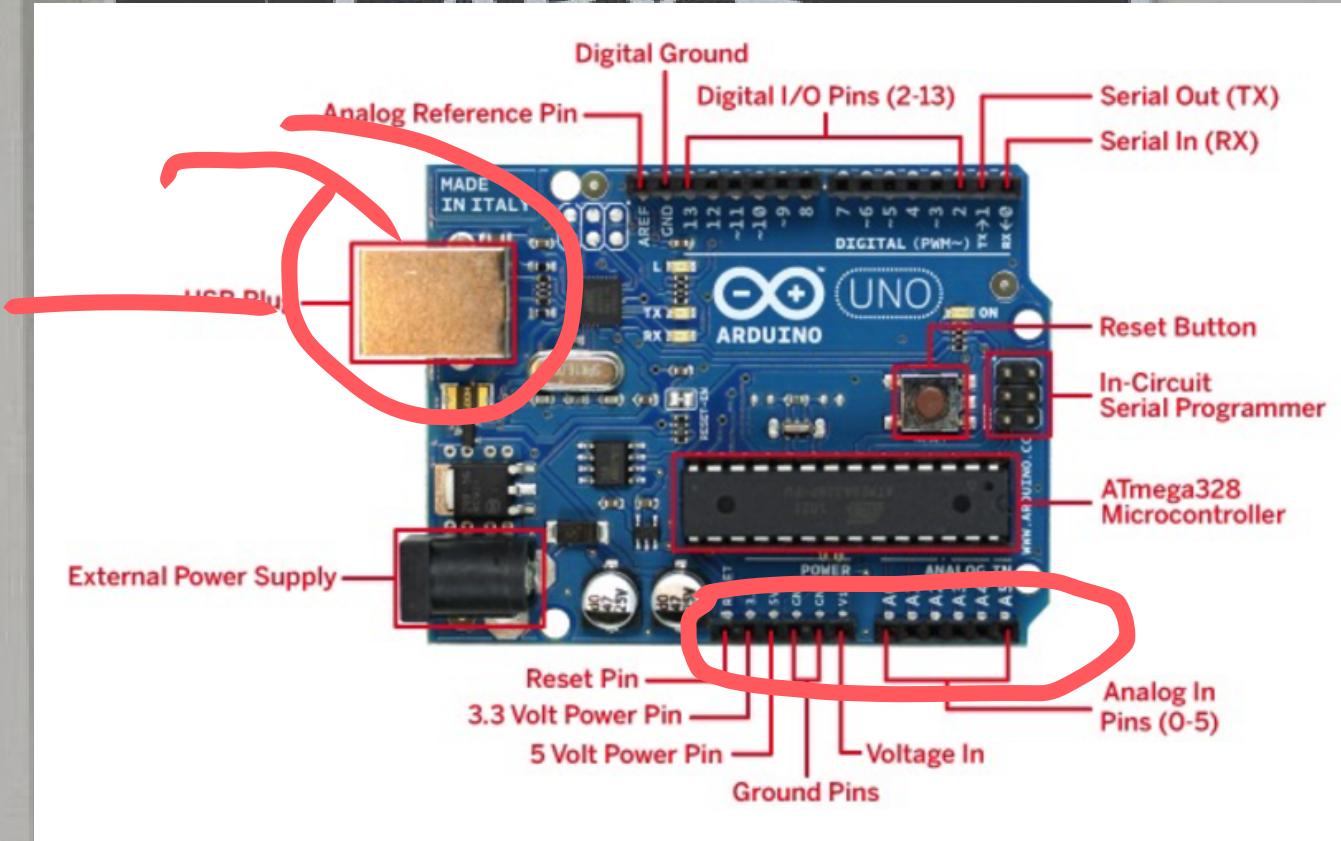


# Neden Arduino?

- Ucuz
- Platformalar Arası
- Basit ve sade programlama arayüzü
- Açık kaynak
- Genişletilebilir ve Esnek



# Nasıl Çalışır?



# Örnek Arduino Projeleri

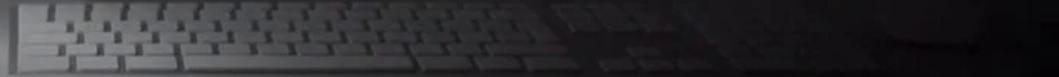


Reyhan Akdemir - Memories Music Box



Paylaş

# MEMORIES MUSIC BOX



İzlemek için: YouTube



# SOLAR LOOPS - Greenpeace Artist On Board Exhibition 2017, Istanbul, TURKEY

alp tugan

Alp Tugan

00:36



kenAc

GREENPEACE  
vimeo



# Greenpeace Rainbow Warrior Early Prototypes

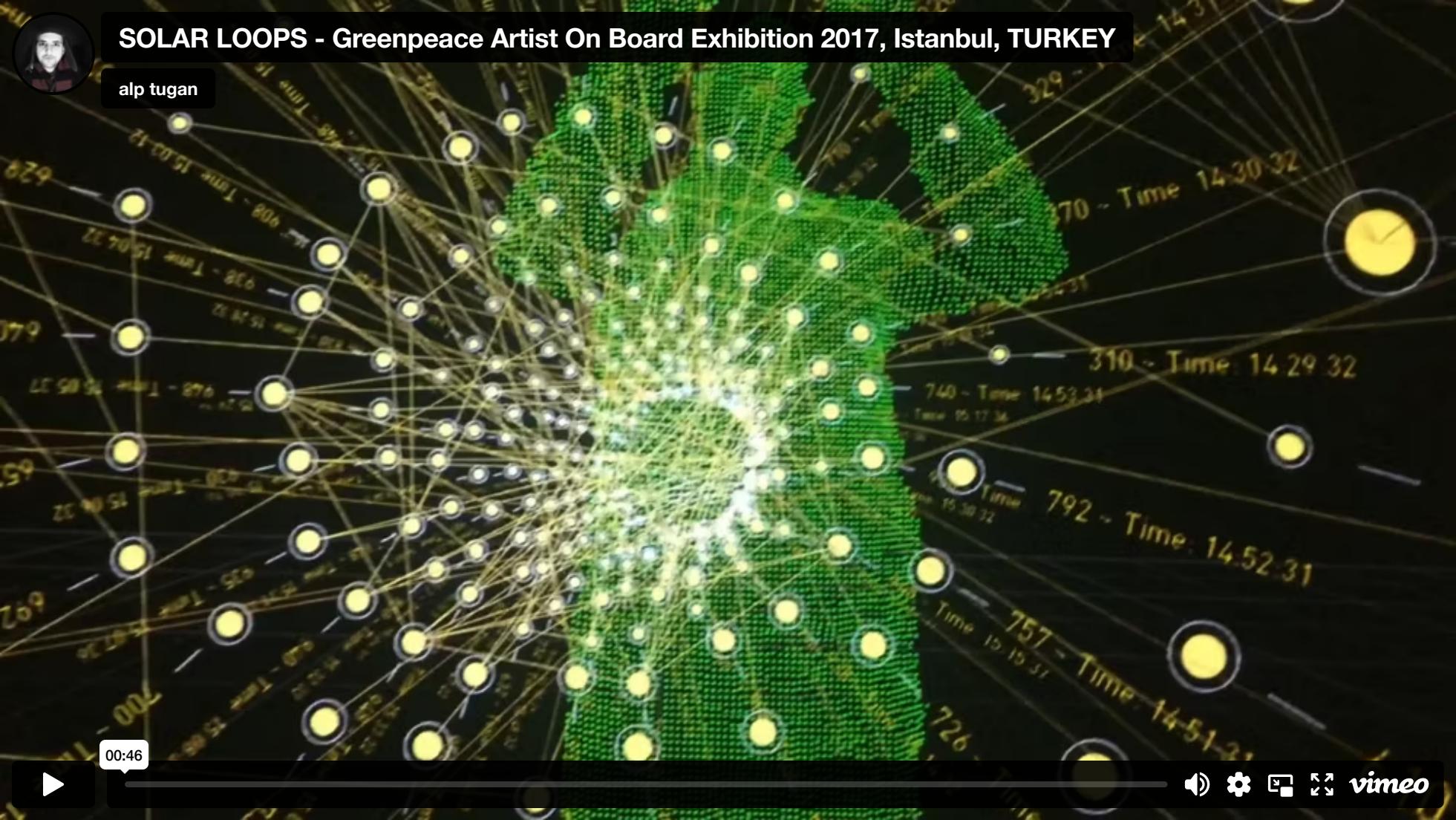
alp tugan





**SOLAR LOOPS - Greenpeace Artist On Board Exhibition 2017, Istanbul, TURKEY**

alp tugan







## Down to Earth: A Generative Art Installation by RAW



Paylaş



İzlemek için: YouTube



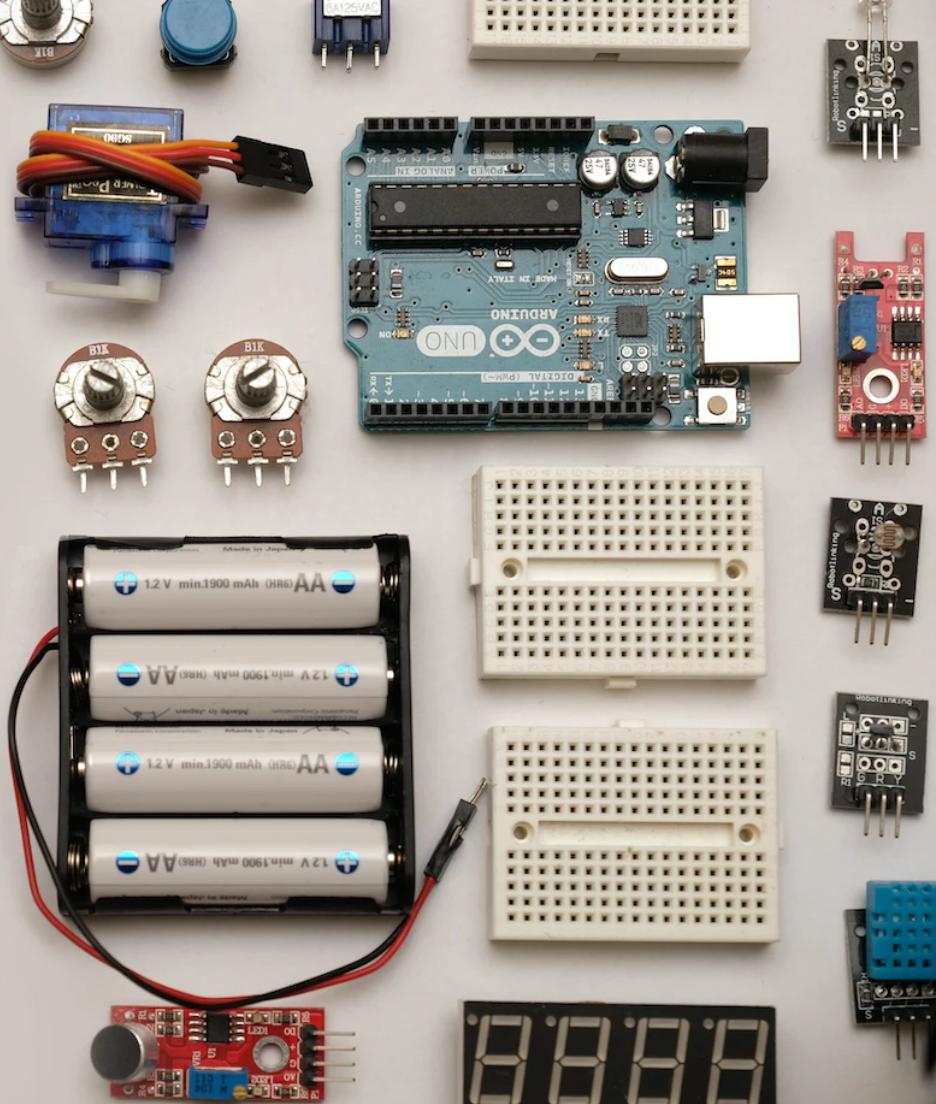
Paylaş



# Nasıl Öğrenebilirim?

# Arduino Way

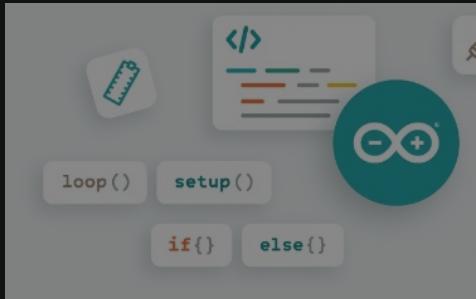
- 🛠 Make instead of talking
- 😭 Getting lost 💩
- 🤓 Hacking



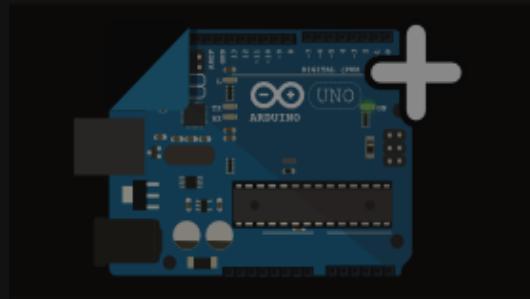
DENEY



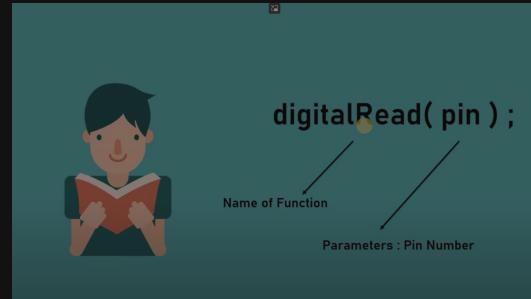
# Kaynaklar



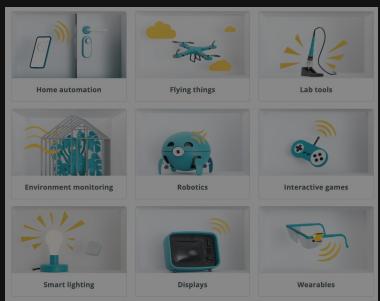
Arduino Örnekleri



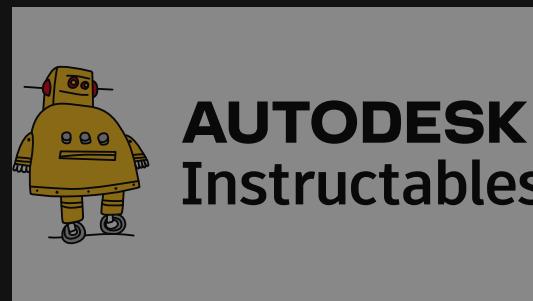
Arduino Simülörü



Youtube



Arduino Projects



Instructables



Books

# Kaynaklar

CAN-VS      Blog      NFTs      Education      Archives      Objects      Jobs      Submit

## /arduino (258)

List    Grid    Slideshow    Metadata

**Ghostwriter - GPT3 Powered Typewriter**  
ghostwriter is a project that invites us to recontextualize the typewriter as a machine that can both tackle and physical form. Imagined as a core interface for the typewriter, it receives all the digital instructions and takes us on an emotional journey through paper and ink.

**plant\_bots**  
plant\_bots is a line-based microcontroller installation which tracks a living plant and a computer are interdependent. Essentially the plant attempts to teach the computer varying image recognition. Through this process the plant learns what it needs to do when the plant needs water based on images it takes of the plant.

**MEMOGRAM - TimeR**  
Created by Jerry Hermann  
A monocamera that prints a series of images, writing those messages in images.

16/12/2022      Aristedo / jhermann / 1 Order

## 29161 Results for "arduino"

TYPE	
Project Log	8329
Projects	8503
Comments	5233
Project Details	4907
Project Instructions	2776
Hecker Pages	388
Stack Entries	73
Participations	60
Lets	42
Events	9
Courses	1
TAGS	
arduino	4057
hardware	3282
ongoing project	3071
finished project	2078
resistor	889
MSC	796
Software	752

**8-bit binary/hex/braille keyboard**  
Project by hayley\_jones  
USB keyboard that lets you type in 8-bit binary!

**food replicator**  
Project by bouscher  
The food replicator is a nice diy automation and gardening project researching enterprise production.

## Creative Applications

## Hackaday

Raspberry Pi    Arduino    DIY Electronics    Prog

### GETTING STARTED WITH THE ARDUINO

by Scott Campbell | Last week

In this article, we will look at some of the parts and supplies that will help you get started.

**READ MORE**

### AN IN-DEPTH LOOK AT THE ARDUINO UNO PCB

by Scott Campbell | Last week

The Arduino is an electronic prototyping platform that makes it easy to build fun and useful...

**READ MORE**

fritzing electronics made easy

Projects    Parts    Download    Learning    Services    Contribute    FC

### Most recent projects

**Read/Write Serial EEPROM via I2C**  
by vasco

**Arduino Knight Rider with 8 Blue 12V LED Modules**  
by usLEDSupply

**Serial Voice**  
by Hiroka\_Kozumi

## Circuit Basics

## Fritzing

Teşekkürler 

