

**build your
own robot**



**why are robots
important?**

hoover my floor

future

explore

technology

learning

AI

manufacturing

education

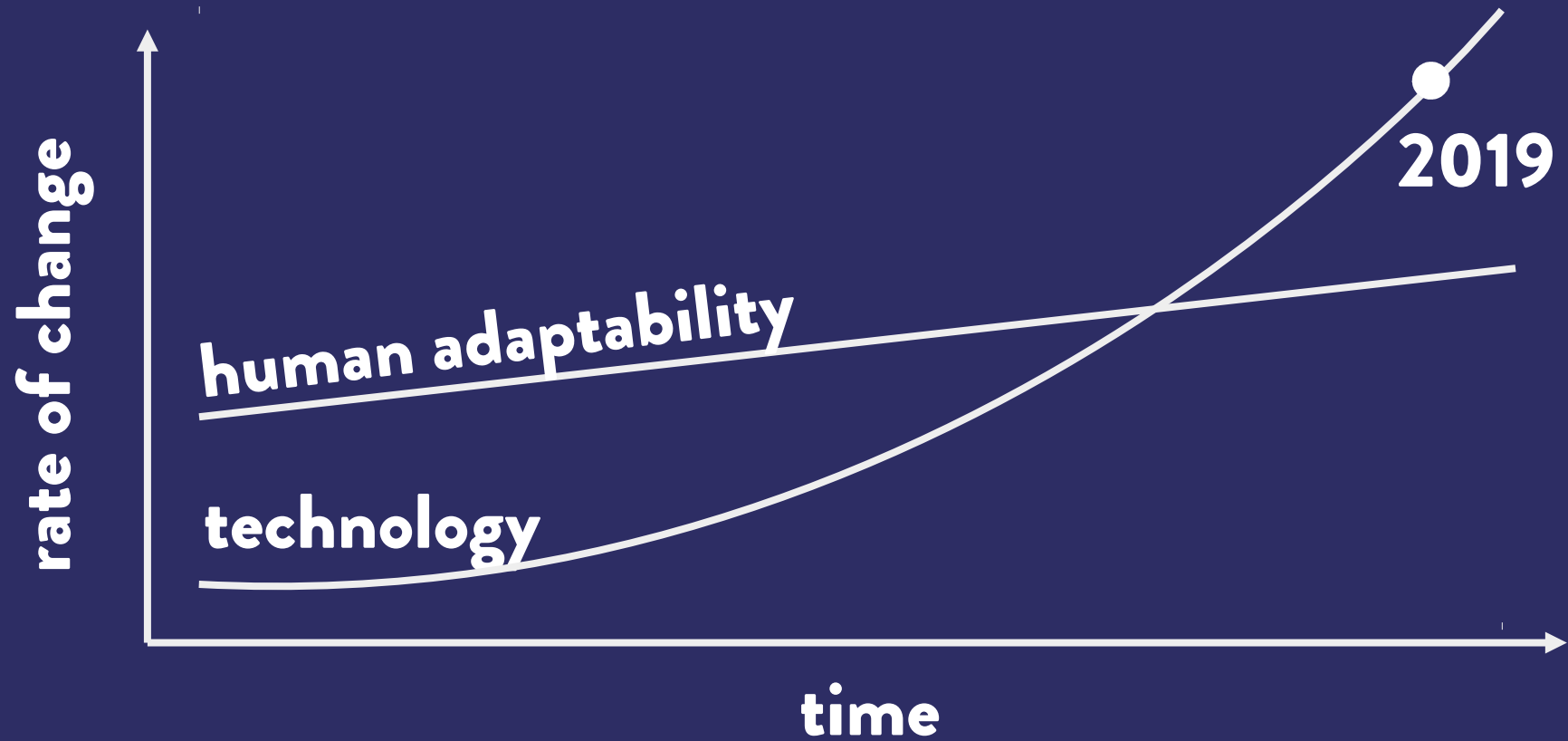
IoT

play

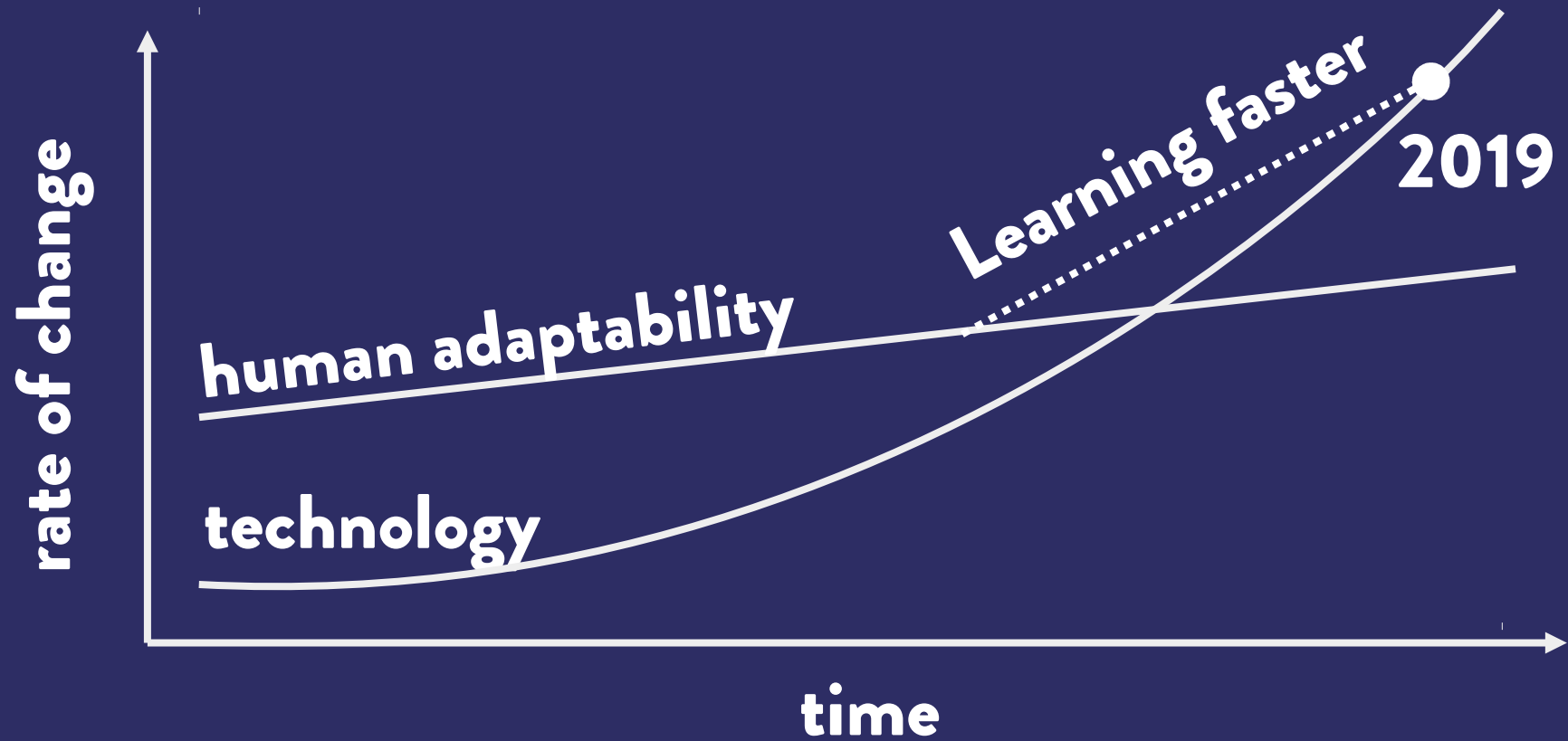
science

they are coming!

they will take your job



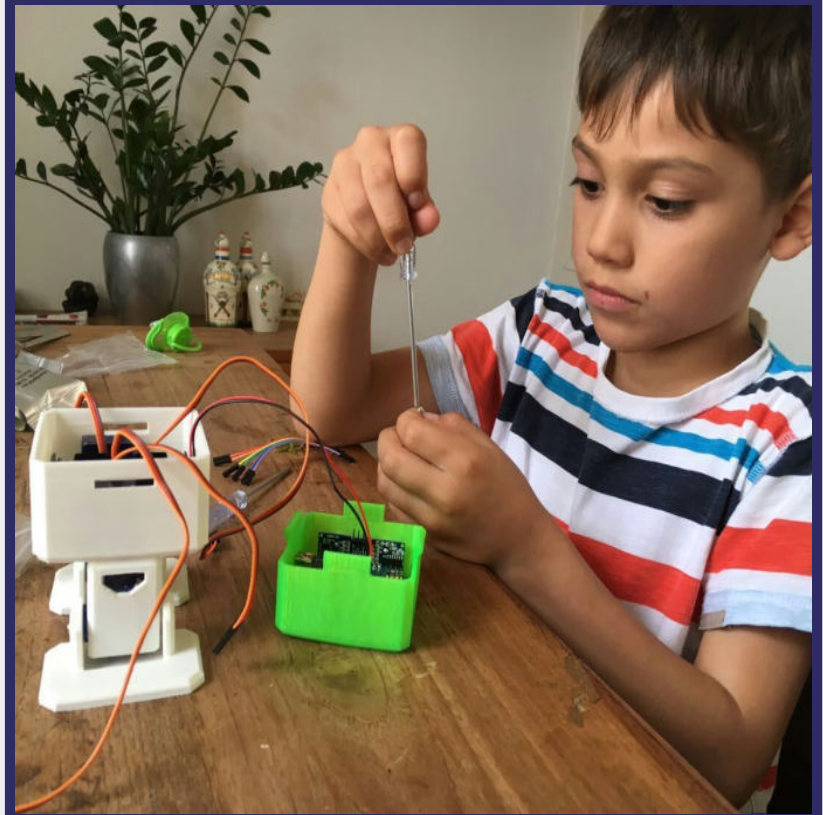
Source: Eric Teller GoogleXLab



Source: Eric Teller GoogleXLab

**have you ever
built your own robot?**

The best way to avoid being replaced by a robot, is to become the robot maker. In the past you needed to be an engineer to do that. Not anymore.

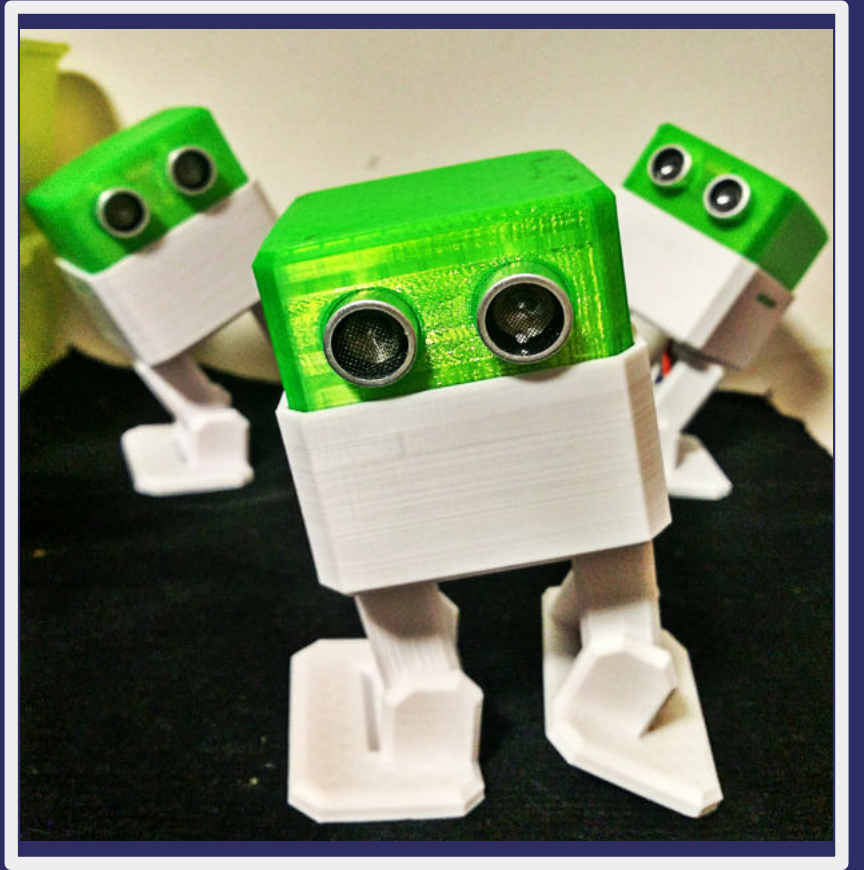


**build your own Otto
in 1 hour!**



who is Otto?

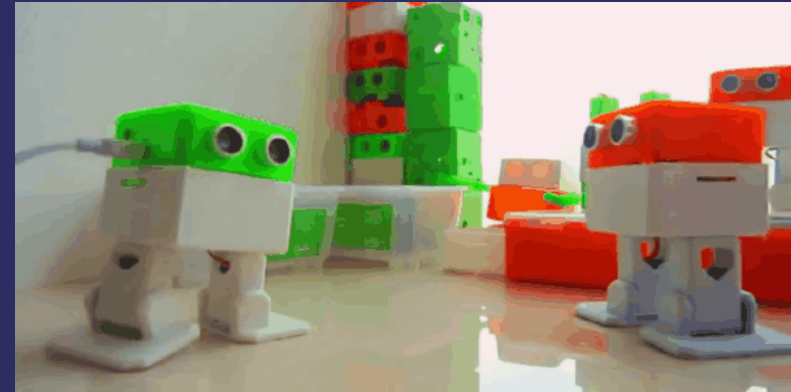
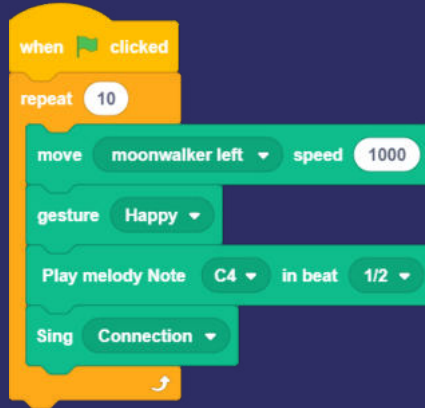
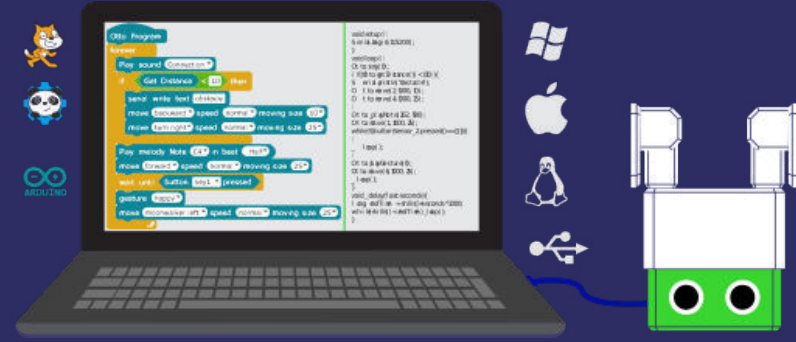
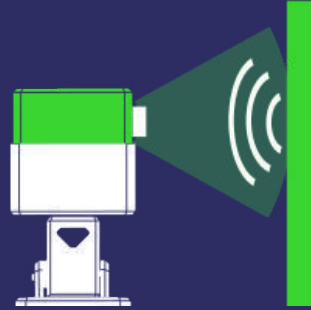
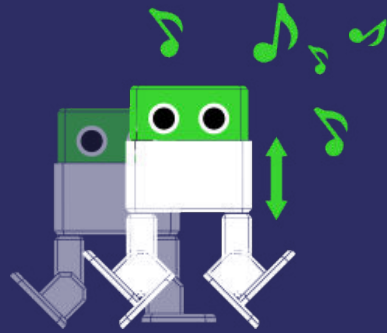
**Otto is an interactive
robot that anyone can
make.**



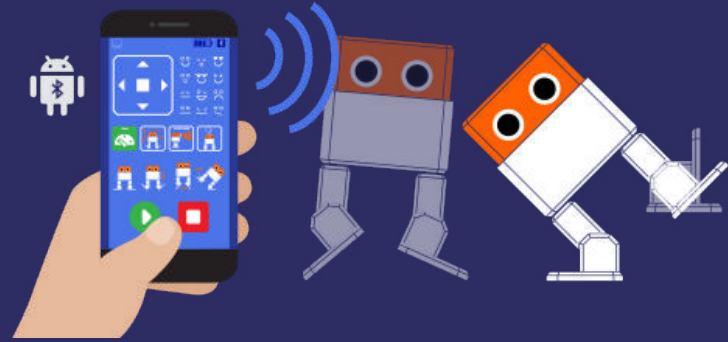
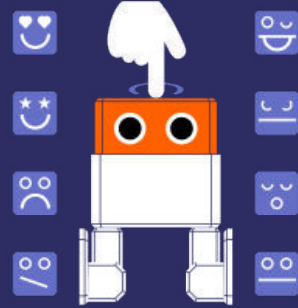
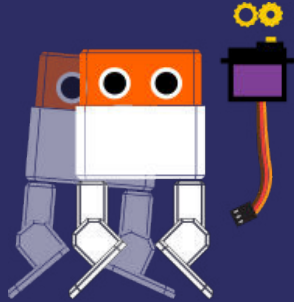


what can Otto do?

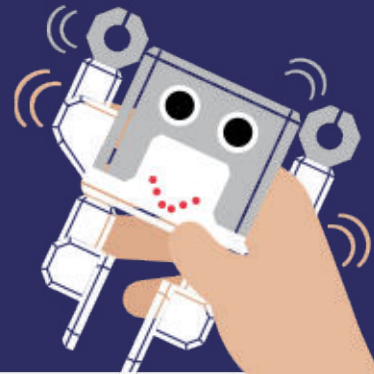
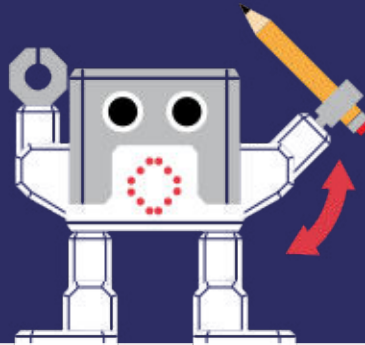
DIY



DIY+



HUMANOID



**truly
open source hardware**

open source

- access to all source
- NO vendor lock
- FREE copy & remix
- community driven

open recipe

- recipe is shared online
- universal ingredients
- FREE cook & modify
- publish new variant



**By sharing openly our
knowledge, we enable
everyone in the world
to build robots.**

Otto builder community 2500 members, 65 countries



**Open source allows
people to learn and
collaborate on a global
scale, regardless of
the background.**



**Small bipeds are the
biggest and broadest
family among open
robots.**

**We encourage people
to copy & remix.**

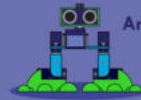
open source biped robots genealogy



Easybiped™



Ardupod



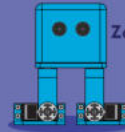
BoB



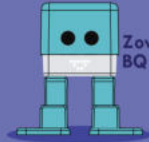
Minion



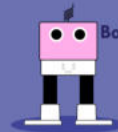
Zowi



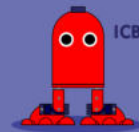
Zowi BQ



Bobwi



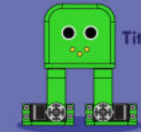
ICBob



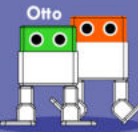
MobBob



Tito



Otto



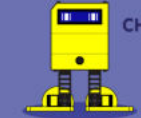
Ayunkowi



Mini Zowi



CHIP-E



innovi



Teapot



At least 55 remixes & replicated over 10000 times



**what can you
do with Otto?**



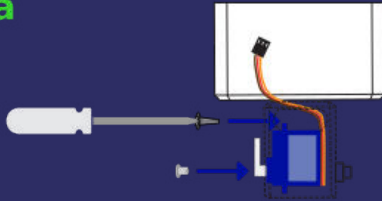
**Experimental learning
and iterative
education.**

Learning by doing
**“Learn to build then
build to learn”**

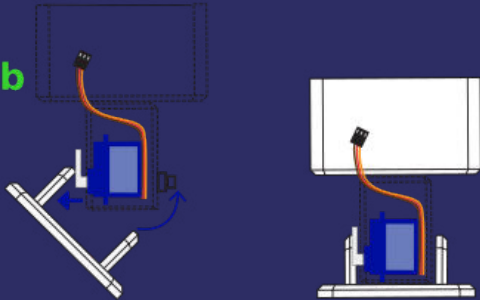


Mechanics

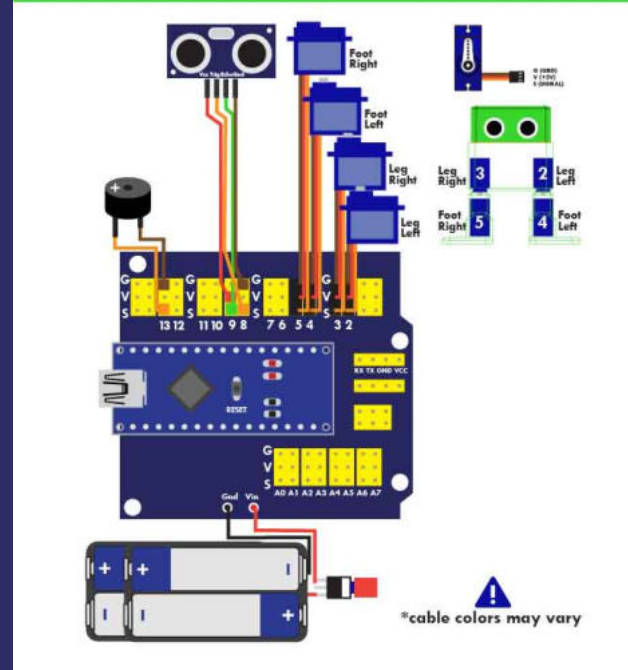
a



b



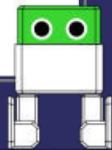
Electronics



Programming

Otto_avoid.ino

```
52 | void loop() {  
    if(obstacleDetected){  
        Otto.sing(S_surprise);  
        Otto.playGesture(OttoFretful);  
        Otto.sing(S_fart3);  
        Otto.walk(2,1300,-1);  
        Otto.turn(2,1000,-1);  
        delay(50);  
        obstacleDetector();  
    }  
    else{  
        Otto.walk(1,1000,1);  
        obstacleDetector();  
    }  
}
```



Design



why is Otto special?

**It is a Gender neutral
product, that let
children choose their
own creative path.**



**It is more than just a
robot the act of
building and coding
your own Otto will
create an emotional
connection.**



**It is more than just a
robot the act of
building and coding
your own Otto will
create an emotional
connection.**



**you can also
build your own Otto!**

save the date:
22-23 June / 2019
see you in Prague!



thanks!



děkuji!

ottodiy.com