

# A Day at the Maker Faire

John Glauvitz

May 20, 2018



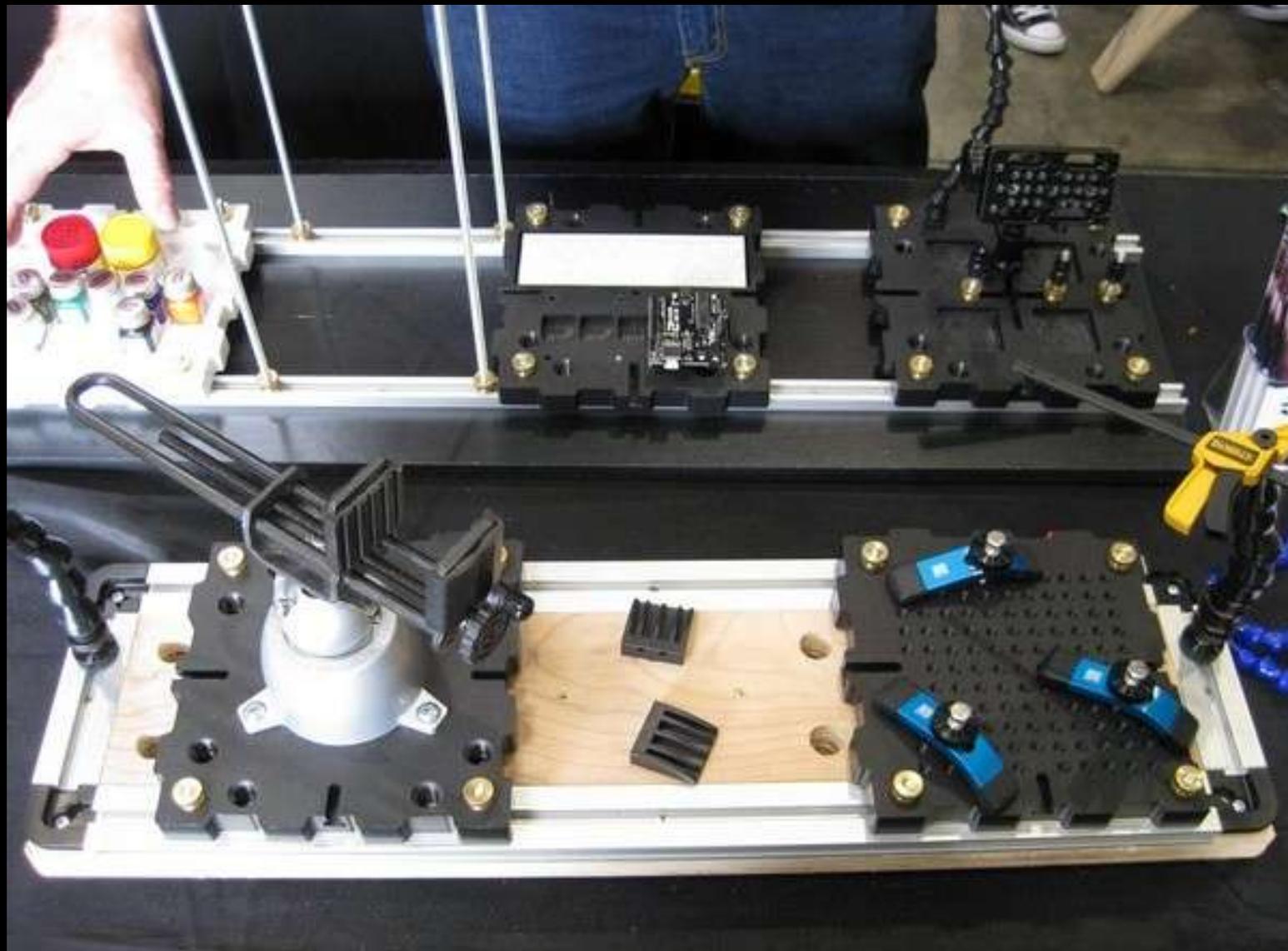












2019 ANNOUNCING **Maker Faire** BAY AREA

## RaptorLoc System



The RaptorLoc system is comprised of CNC-machined bases that utilize a variety of attachments to hold your bench-sized products securely. Some of the numerous users that will benefit include home crafters, electronics enthusiasts and R/C vehicles.

### Jotham McMillan

Jotham is a San Mateo-based father of three who transitioned from his full-time job to launch this series of products.



20, 2019



Robonica Srl

THE TACTIGON

**THE TACTIGON**  
WEARABLE ARDUINO  
WITH MOTION SENSOR



- USB rechargeable
- Bluetooth Low Energy
- Expansion I/O
- IMU  
3D Accelerometer  
3D Gyroscope
- MICROCONTROLLER  
32 bit 512 Kb Flash  
16 Kb EEPROM  
60 Kb RAM
- LED
- Crowe
- IMU  
3D Magnetometer
- ON/OFF button



**THE TACTIGON™**  
Gesture Controller for Robotics, Drones, AR/VR and Gaming with Arduino



- 32-bit 512 Kb Flash
- 16 Kb EEPROM
- 60 Kb RAM
- ON/OFF button
- LED
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- IMU  
3D Magnetometer
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THE TACTIGON.COM

**THE TACTIGON™**  
Gesture Controller for Robotics, Drones, AR/VR and Gaming with Arduino



Kuri





# THE TACTIGON™

The perfect link between HUMAN and the DIGITAL WORLDS

THE TACTIGON.COM

- ✓ COMPATIBLE with Android OS
- ✓ COMPATIBLE with Windows and Linux
- ✓ COMPATIBLE with other 3rd Parties



## Specifications

- Dimensions**
- Weight**
- Material**
- Color**
- Compatibility**
- Power Supply**
- Connectivity**
- Buttons**
- Trackball**
- Joystick**
- RGB LED**
- Material**
- Weight**
- Material**
- Weight**



THE TACTIGON.COM







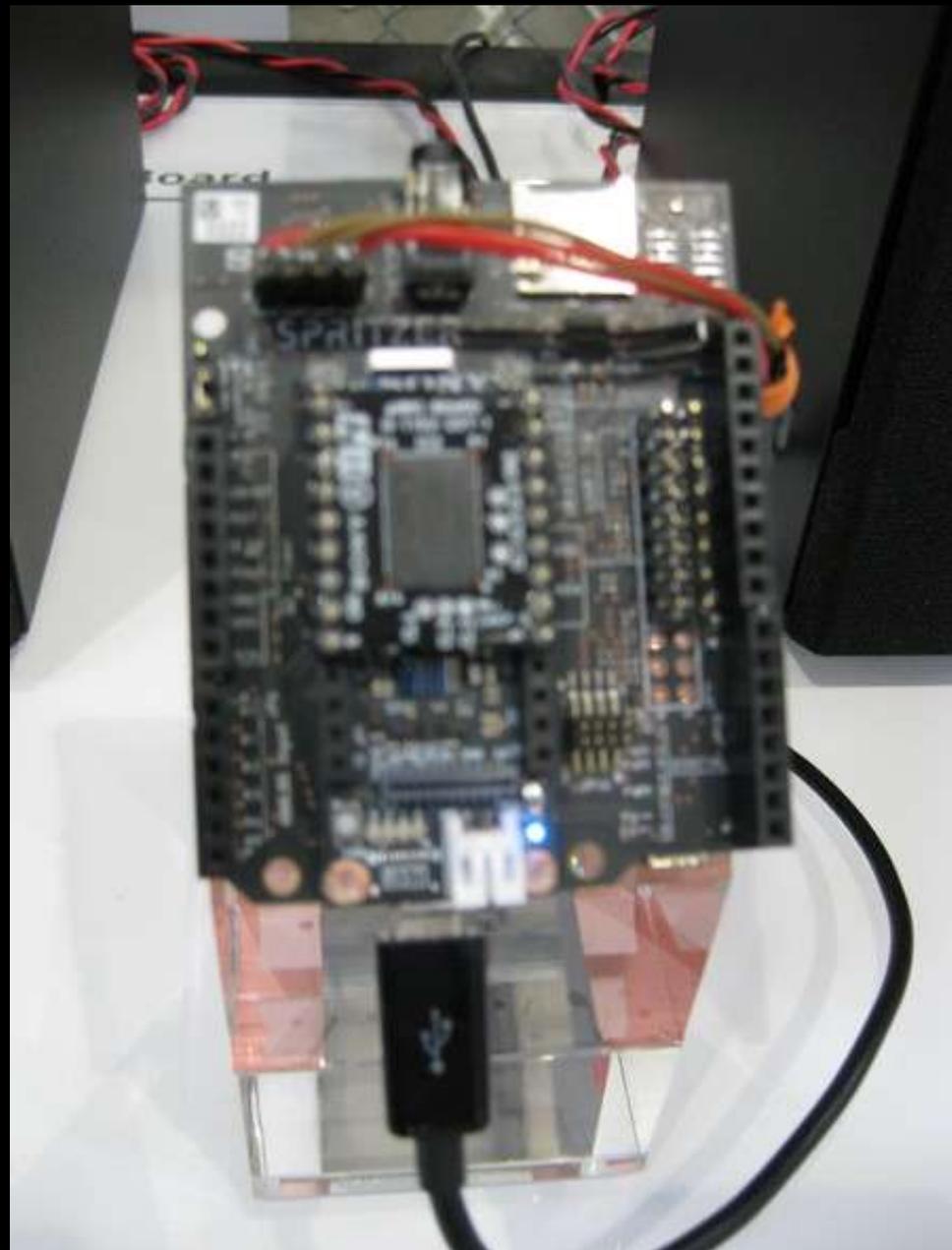
SONY

SONY

board

NRPER JENFER JF NVENCF  
**SPRESENSE**  
NRPER JENFER JF NVENCF

Evolution will turn into a good sound system by your skill



**Infineon**

Digital barometric pressure sensor for mobile and wearable devices

SPR010 is a monolithic digital barometric air pressure sensor with a high accuracy level and low current consumption. The SPR010 is built as pressure and temperature sensor. The barometric sensor element is based on a capacitive pressure effect allowing high precision during temperature change. The small package makes the SPR010 ideal for mobile applications and wearable devices.

**Key Features**

- Pressure: 100 - 1200 hPa
- Temperature: -40 - 80 °C
- Pressure resolution: 0.009 hPa (at 1.5 m/s)
- High precision mode
- Pressure update rate: 100 Hz
- Temperature update: 0.02 hPa (at 1.5 m/s)
- Temperature resolution: 0.02 °C
- Pressure Accuracy: ±0.3 Pa (1.5 m/s)
- Measurement time: 100 μs (typical)
- Average current consumption: 1.6 μA (typical)
- Supply voltage: 1.8V - 3.3V - 5V - 1.8V - 3.3V

**Applications**

- Altitude measurement - Four direction e.g. in shopping malls and parking garages
- Speed and speed - Accurate elevation gain and vertical speed
- Outdoor navigation - GPS start-up time and accuracy improvement
- Local weather station

Key features: 2.8 mm x 2.8 mm x 0.8 mm

**Functional Block Diagram**

**Application circuit example**

©Infineon Technologies AG 2015. Infineon Technologies Japan Co., Ltd. [www.infineon.com](http://www.infineon.com)  
Mitsumi Inc., Toshiba Company [www.infineon.com](http://www.infineon.com)

**ROHM**

Sensors & Bluetooth® Add On Boards for Sony SPRESENSE™

Integrate multiple sensors and Bluetooth® SoC

**Features**

- Supports multiple sensors on 10 channels: 10 channels, 10 channels, 10 channels
- Supports multiple sensors on 10 channels: 10 channels, 10 channels, 10 channels
- Supports multiple sensors on 10 channels: 10 channels, 10 channels, 10 channels

**Applications**

- IoT applications
- Wearable applications with Bluetooth® SoC
- Smartphone applications

**Block Diagram**

**Product Images**

**Specifications**

- SPRESENSE is a trademark of Sony Corporation.
- Bluetooth is a registered trademark of Bluetooth SIG.
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**ROHM Co., Ltd.**

SPRESENSE  
Add-on BOARD

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Mitsumi Inc., Toshiba Company [www.infineon.com](http://www.infineon.com)

SPRESENSE  
CAMERA BOARD

The camera module on the board is a Sony IMX214. The camera module is a 2MP CMOS image sensor with 1/4.0" diagonal. It is a 2MP CMOS image sensor with 1/4.0" diagonal. It is a 2MP CMOS image sensor with 1/4.0" diagonal.

SPRESENSE  
eMMC Add-on BOARD

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Mitsumi Inc., Toshiba Company [www.infineon.com](http://www.infineon.com)

MAKER FAIRE NY  
EDITOR'S CHOICE  
AWARD WINNER

WALABOT

# 3D Imaging RF Sensor

Maker Faire Special ~~\$300~~ \$149

Build a Mobile App for Walabot

...king

• Gesture recognition

• See through walls

COMI

Boards &  
Electronics

EXIT



Sensor

WALABOT  
COMING SOON **DIY**



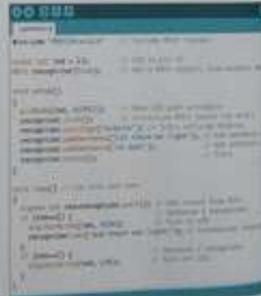
**AUDEME**

## MOVI™ Arduino® Shield: Speech Recognizer & Synthesizer



Maker Faire Special  
MOVI Board  
\$50+tax

- ✓ Full sentence speech recognition (up to 150 phrases)
- ✓ Completely programmable and customizable
- ✓ On-board microphone or headset compatibility
- ✓ Integrated speech synthesizer
- ✓ Convenient programming interface using Arduino® IDE
- ✓ Privacy friendly: No Internet or PC connection required
- ✓ Works with most Arduino® boards, including Uno, Mega and Due.



**Docs, Demos,  
Downloads at:**  
[www.audeme.com/MOVI](http://www.audeme.com/MOVI)



CAMPAIGN TODAY AT

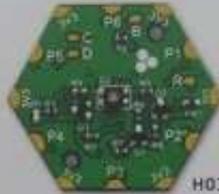


ADD YOUR COMMENTS



# HEXABITZ

Better prototypes. Faster.



H01R00



H02R10



H04R00



P01R00



H05R00



H01R00



H02R00



H03R00



H04R00



H05R00



H06R00



H07R00



H08R00



H09R00

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ALSO VISIT HEXABITZ.COM

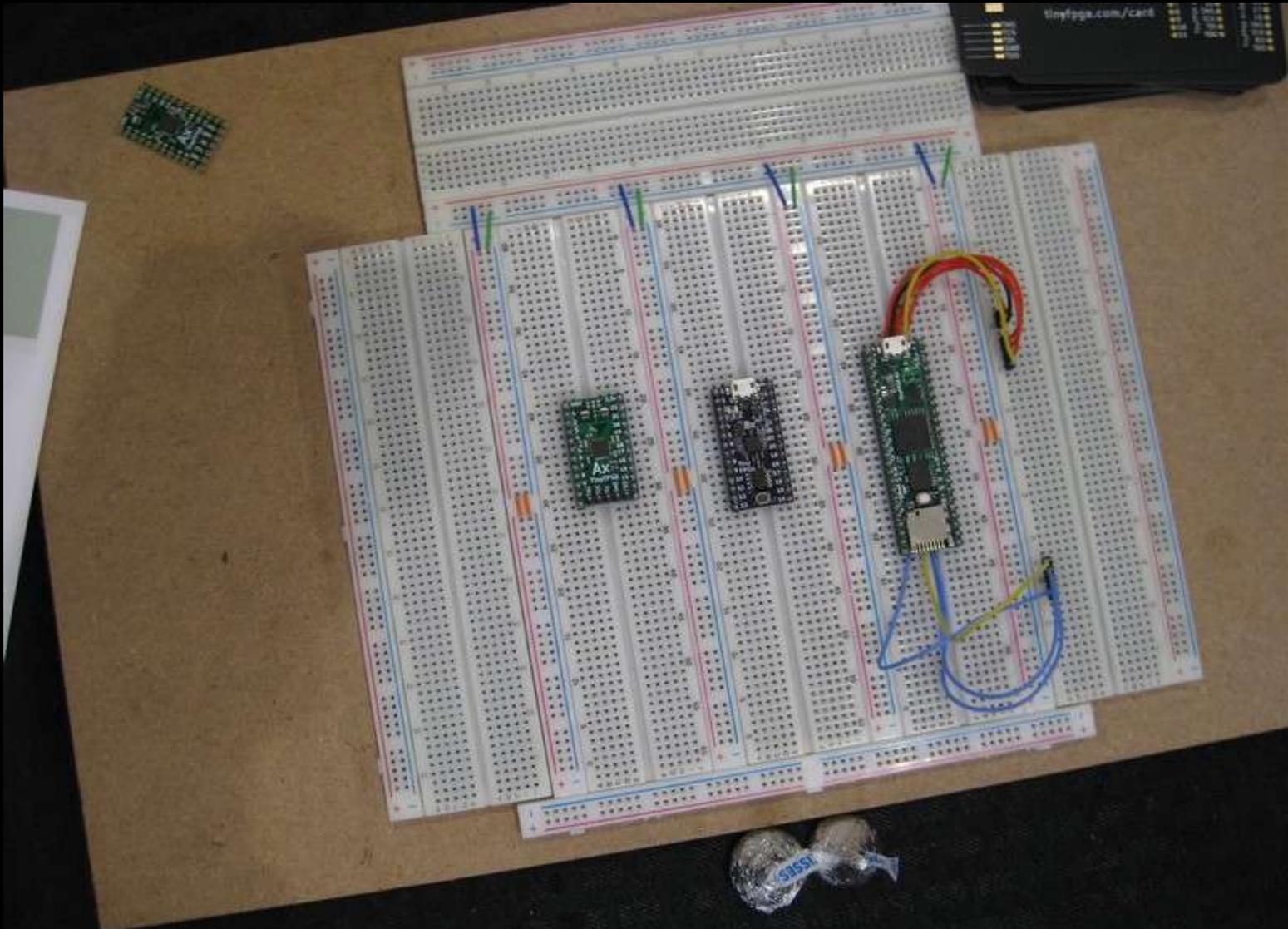
RESTROOMS

EXIT



# TinyFPGA





vinylggs.com/cart

Ax-101

1-Wire

DS18B20

SRSS

# samtec

## FLEXIBLE STACKING SOLUTIONS



## MICRO/RUGGED SOLUTIONS



## SOLUTIONS



## CUSTOM SOLUTIONS





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 **Onion Omega2**



**Invention Platform  
for the Internet of Things**



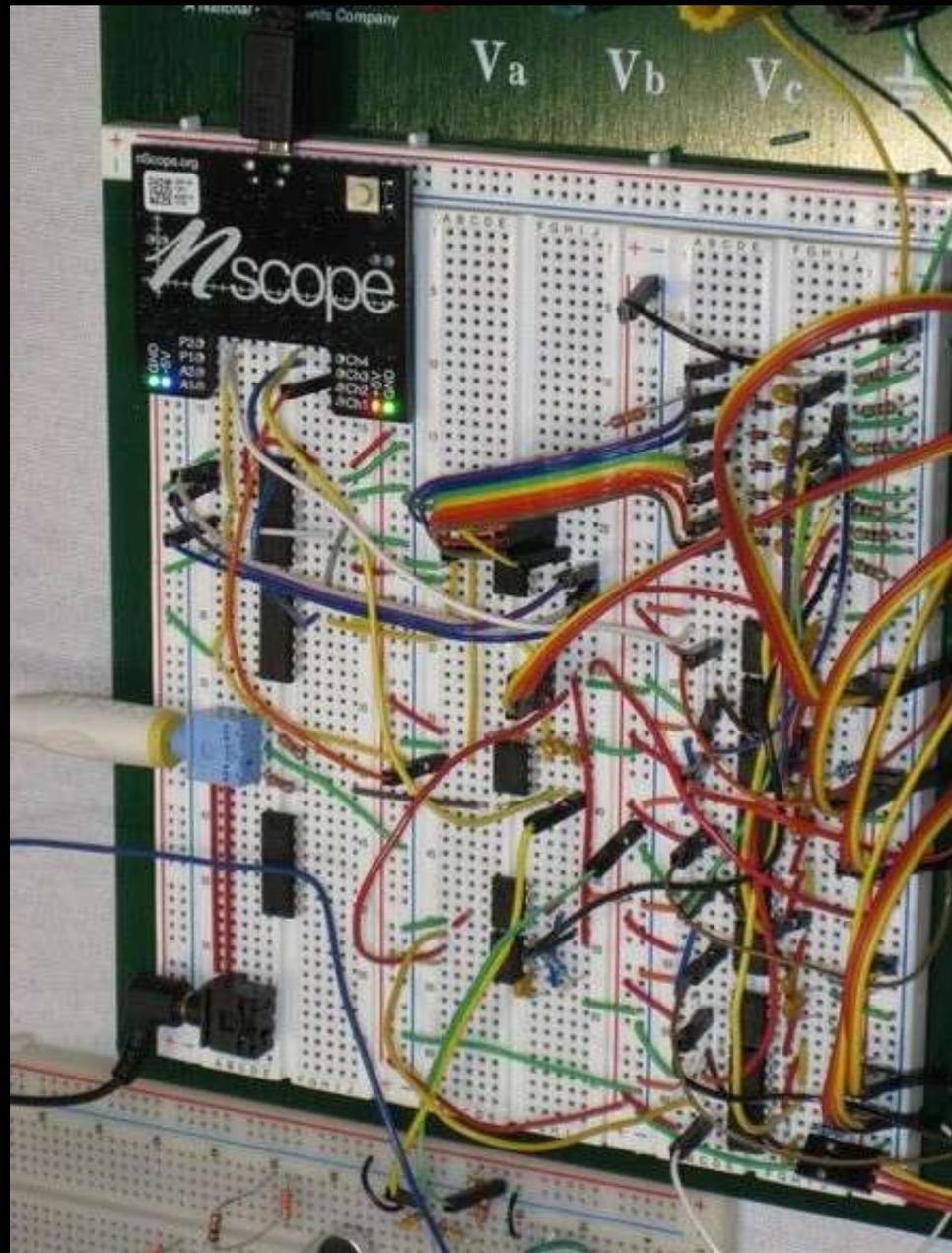
<https://onion.io>

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# BLUEBERRY mESH







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## Bone Conduction Glasses



This is the original bone conduction glasses with a Bluetooth function which can hear music without passing through your eardrums! The main purpose of this device is for people who are difficult to hear environmental sounds.

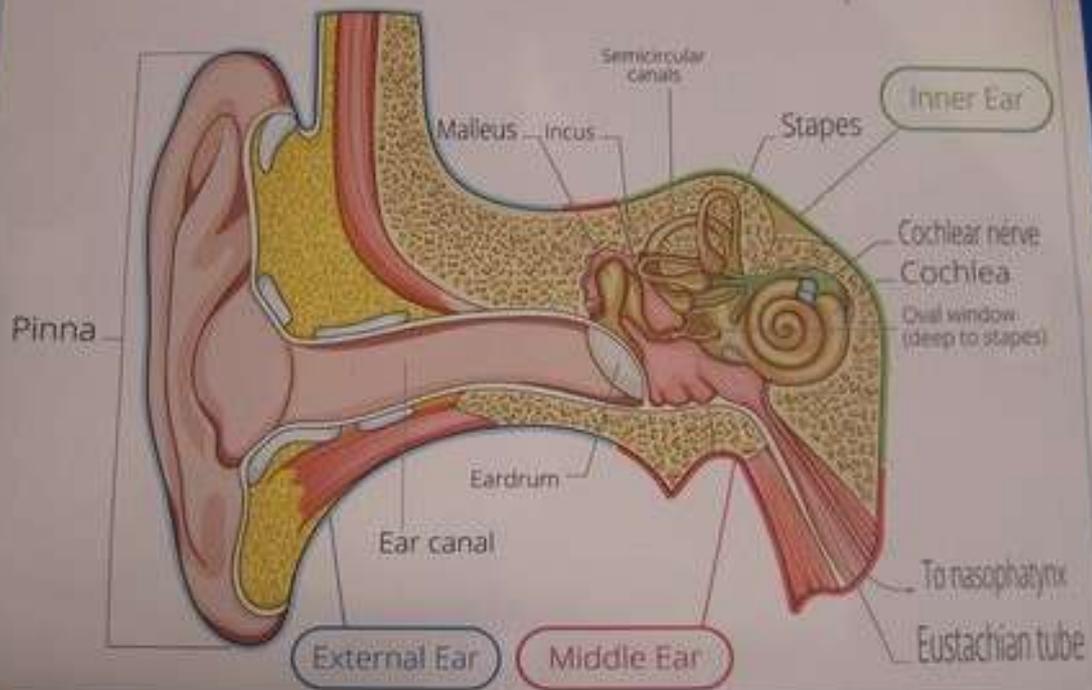
### Kentaro Tanaka

I am a college student who loves electronics. My interest is to design PCB as small as possible and to make prototypes that I came up with as my idea.



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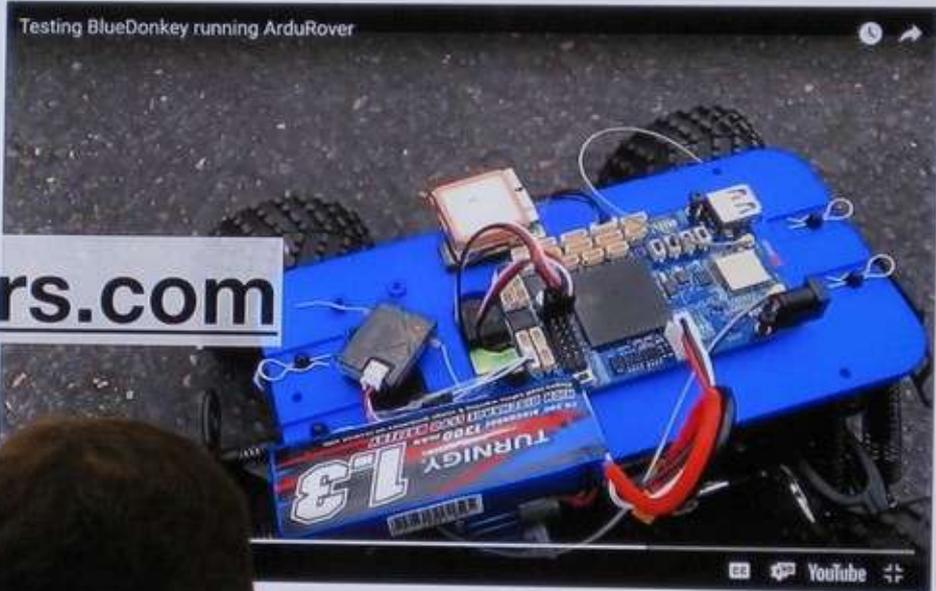
# Human ear anatomy



The image shows a digital display at an event. The display features a photograph of a BeagleBoard XLM (a Raspberry Pi-based board) with a USB drive plugged into its port and a microphone attached to its top. The board is labeled with 'e-ale.org', 'EV. 1', and 'ocket'. To the right of the board image, the URL [bbb.io/e-ale](http://bbb.io/e-ale) is displayed in a white box. At the bottom right of the screen, the BeagleBoard.org logo is visible. The background of the display is red. The screen is set against a backdrop with a pattern of red and yellow stars on a dark blue background, and a red circle with a white microphone icon in the upper right corner. In the foreground, the backs of several people's heads are visible as they look at the display.

[diyrobocars.com](http://diyrobocars.com)

Testing BlueDonkey running ArduRover



YouTube

 beagleboard.org









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The mePed is...



**mePed Robot**  
[www.meped.io](http://www.meped.io)

**Mooey Dazzles Machine**  
QR code and product image

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Beijing Extraordinary Creation Education Center

## Dancer Robot

- Equipped with 18 Servomotors That Exclusively Comes Form Robosen's R&D.
- Can Walk, Dance, and Perform Difficult Motion Like Humans
- There Are 2 Sizes, One is 50cm In Height, other is 40cm In Height.
- You Can Make Motion Programs, Visualization In Your Computer, End-user Can Play Easily and Do Anythings More Fun Between Systems and Robot.
- Can Program and Control For Your Demand.

北京非凡创造教育科技  
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Beijing Extraordinary Creation Education Limited (Beijing)  
Institute specialized in science and creativity education

Our main products are science and creativity course material included designed for senior high school and primary school students' in-and-extra curriculum activities related societies

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## ROBOT

exclusively Comes Form Robosen's R&D.

ult Motion Like Humans.

a Height,other is 40cm In Height

Visualization In Your Computer.End-u  
For More Fun Between Systems and

of Actions For Your Den









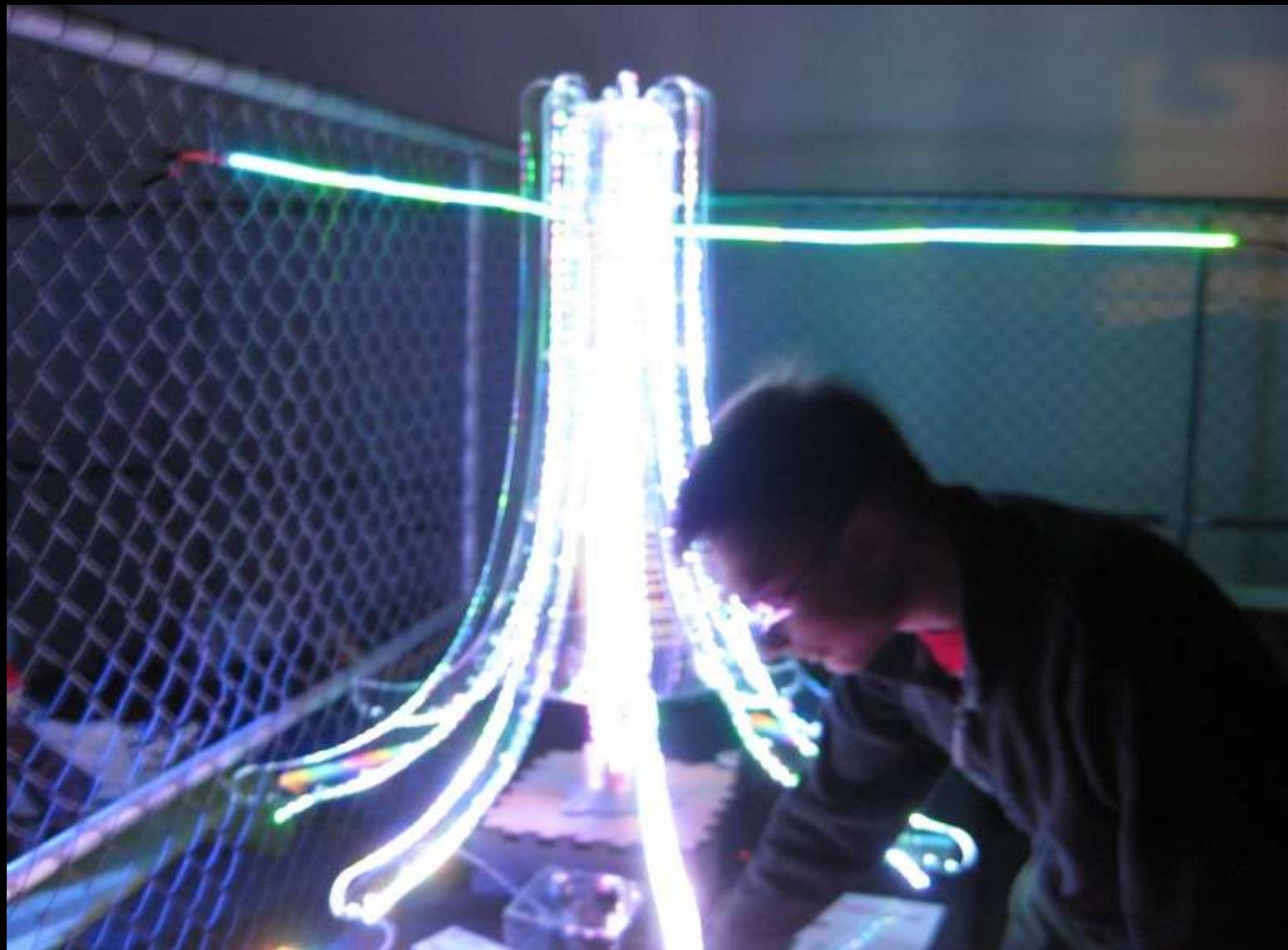
































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## Ursus Redivivus



"Ursus Redivivus" is a sculpture collaboration between Chad Glashoff and Alex Nolan, made from recycled steel parts. Exhibited in Berkeley, Orinda, and soon in Lafayette. If you are brave enough to step into the bear trap, you are in for a surprise!

Chad Glashoff, Alex Nolan



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## Solar Horn



Solar Horn is a 12 foot tall, stainless steel, sound interactivity sculpture. It possesses an elegant form that does not give away the function, although the shape is part of that function.

Justin Grant, Alex Nolan



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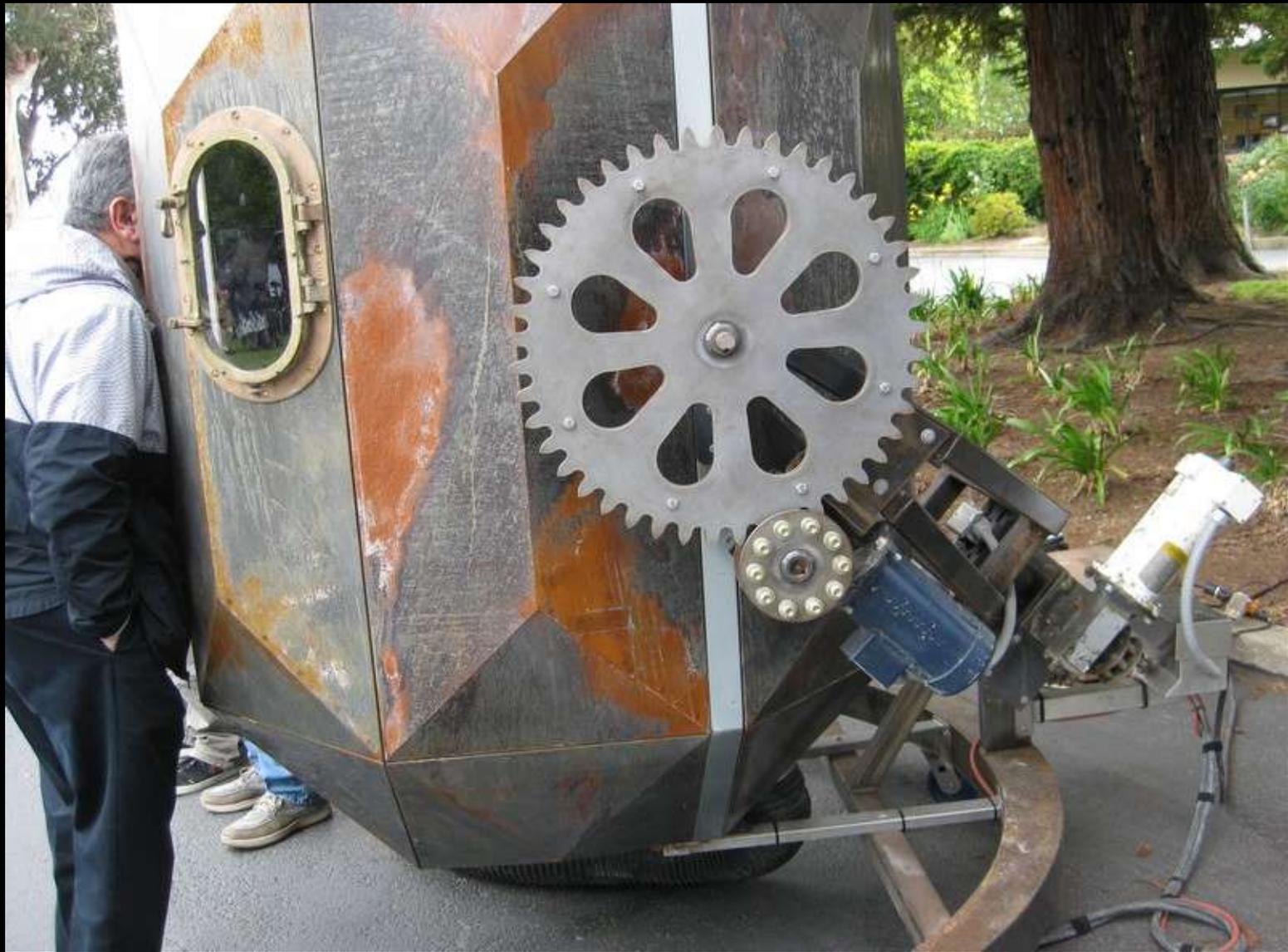






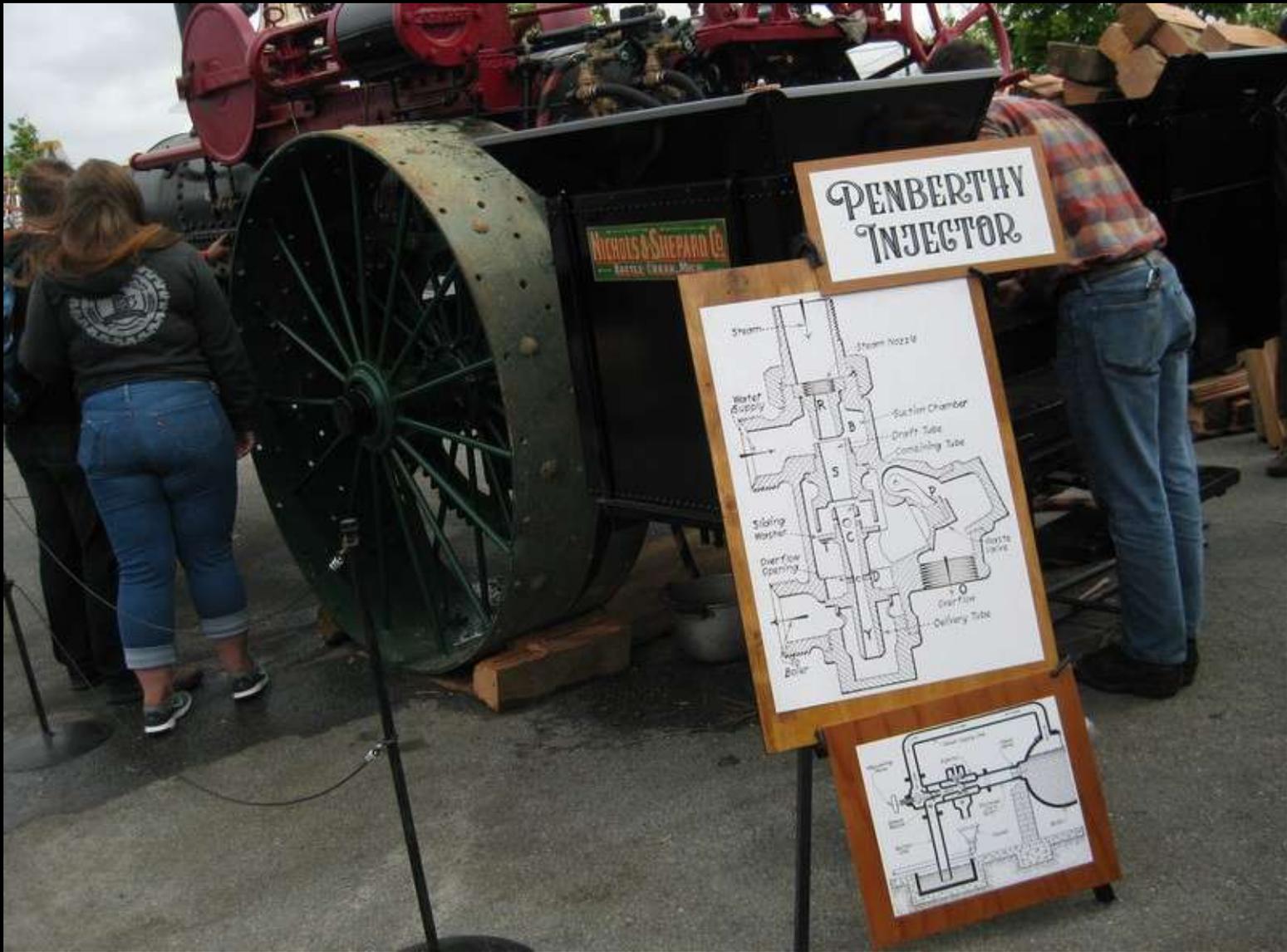




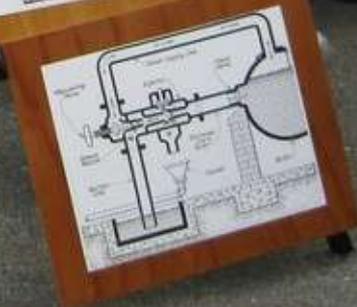
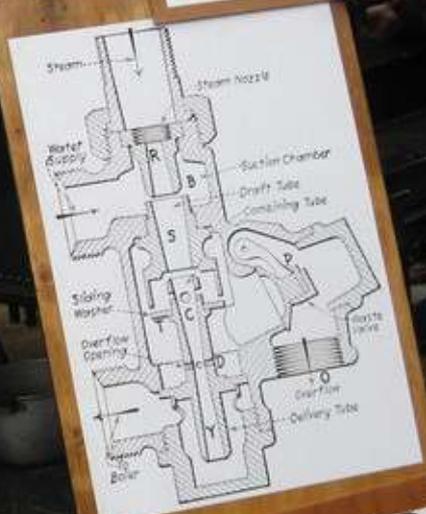








# PENBERTHY INJECTOR

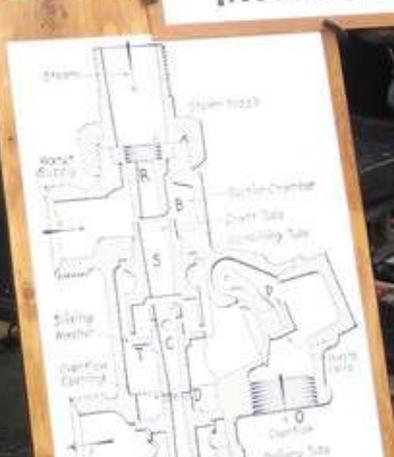


Nichols & Shepard Co.  
MILWAUKEE, WIS.



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PENBERTHY  
INJECTOR







ALL POWER LABS

Local Energy, Food & Water

## LOCAL CARBON NETWORK: LCN



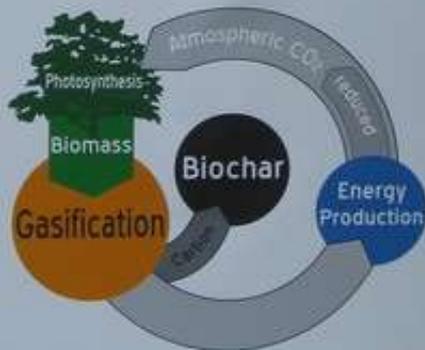
### *The Local Carbon Network*

is community-based carbon management, working in the manner of Local Food, Farmers' Market or CSA. The project closes the carbon cycle by transforming local green-waste into renewable energy, with long term sequestration of carbon in soil as Biochar.

## A Climate Solution for Today

All Power Labs invites you to participate in a local solution for climate change—and one with a big global impact. It happens right where Energy, Food and Water systems meet, right here in your own neighborhood. Our solution uses new biomass conversion technology, combined with soil cultivation at local gardens and farms, to generate energy from green-waste, while at the same time moving atmospheric carbon into soil, and accelerating new plant growth.

The Local Carbon Network forces carbon drawdown by transforming the byproducts of urban landscaping, agriculture and forestry into renewable electricity and heat, with long term sequestration of the embedded carbon into soil as Biochar. In plant biomass, the difficult work of atmospheric CO<sub>2</sub> capture has already been solved via photosynthesis, with solar energy helpfully stored during the process. Unfortunately much of the output we currently call "waste" and pay to make it go away, or just let it rot—sending carbon dioxide and methane back skyward.



## BIOCHAR IS FABULOUS!

[www.allpowerlabs.com](http://www.allpowerlabs.com)

RENEWABLE CARBON FUEL









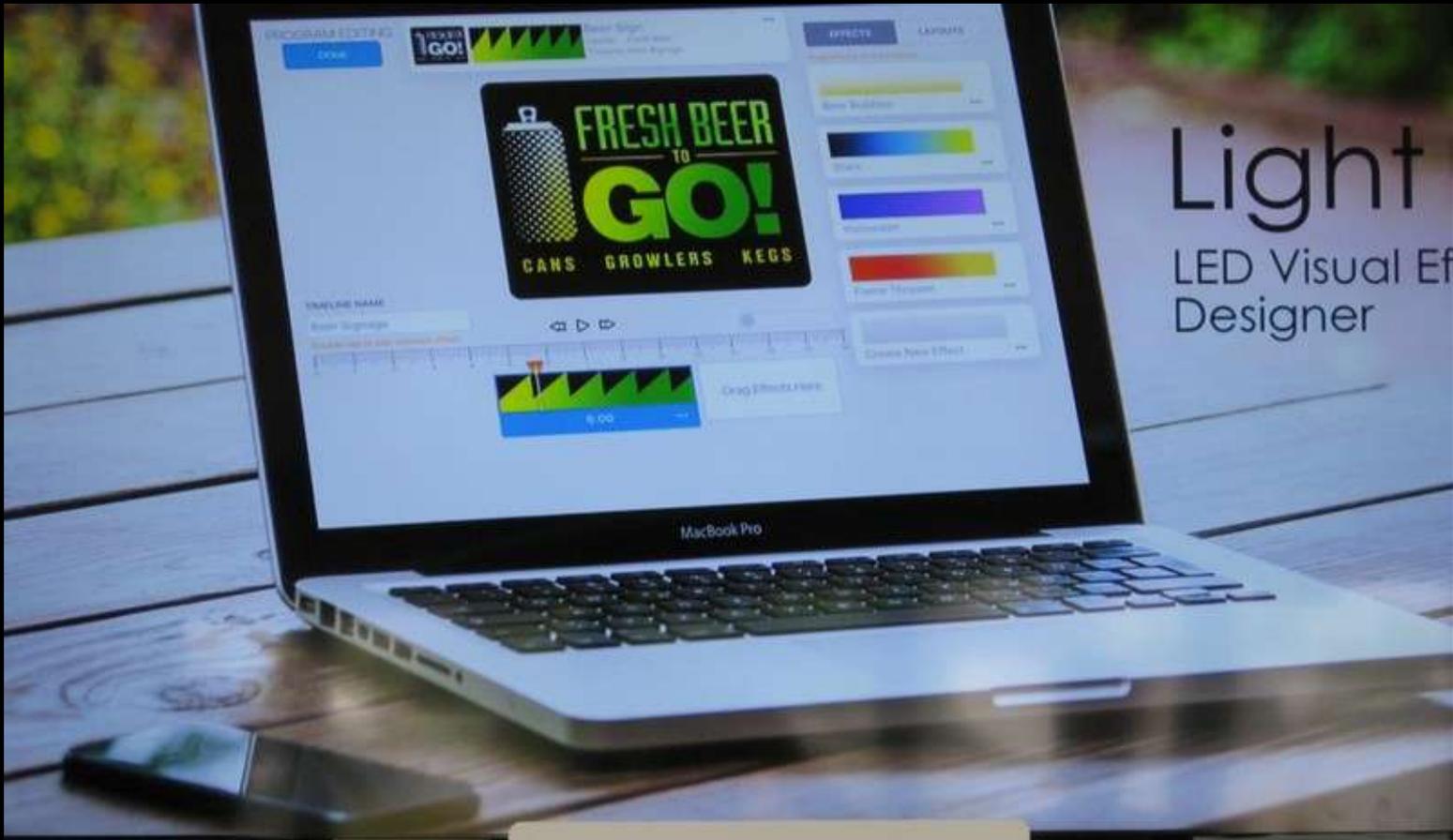




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The End