



1980

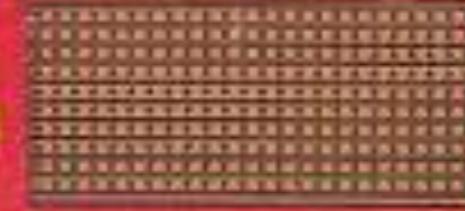
Smaller!
Easier!

Easy to build projects for everyone

OCT. 81
70p

Everyday ELECTRONICS

* FREE *



AND INSIDE A CHOICE OF DESIGNS TO BUILD ON THIS STRIPBOARD

CAREER or PASTIME



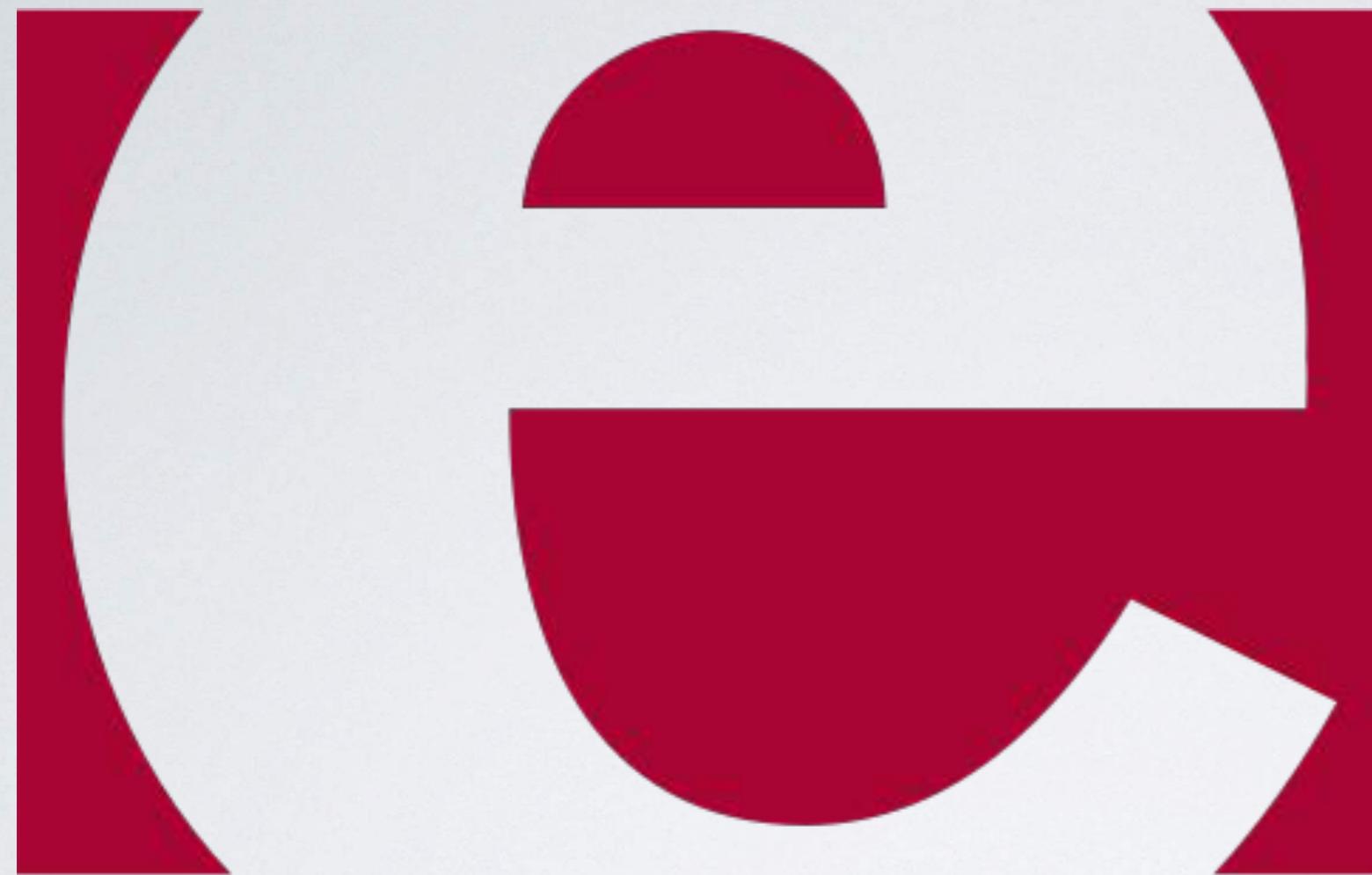
stripboard £1 SAVER

SUSTAIN UNIT CAPACITANCE METER

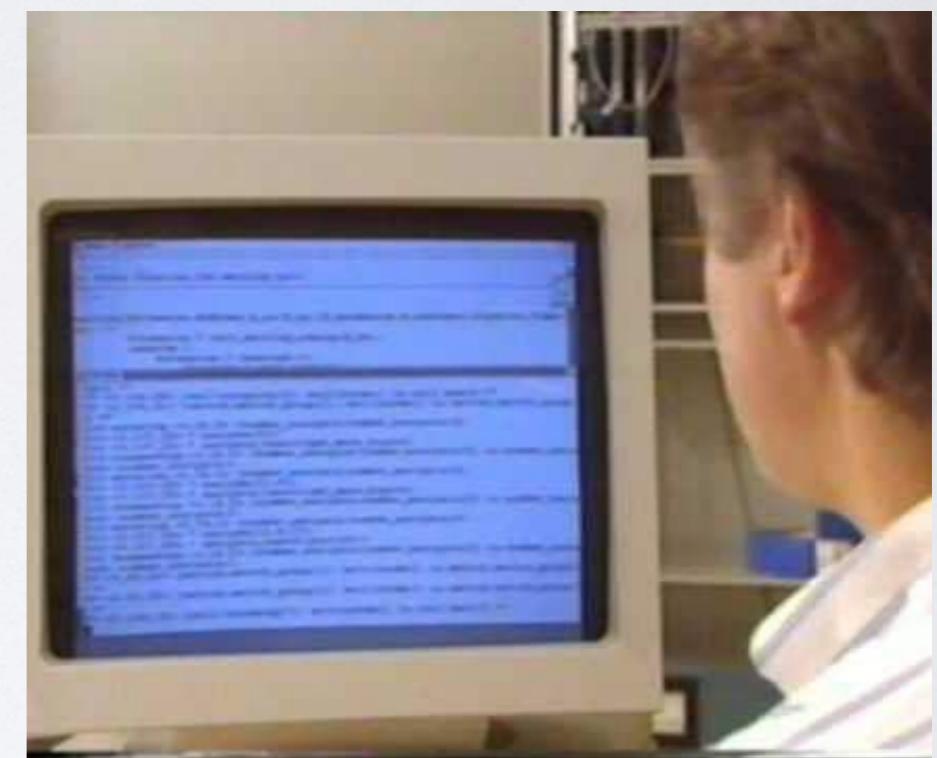
EE MINI LAB

New Series TEACH-IN 82 part one

Australia \$1.50 New Zealand \$1.50 Republica de Mexico 10.00 U.S.A. 7.50



ERLANG



New Languages!

[M] Monochrome (1.101w 07-May-08) (Last on Wed May 14 13:36) [M]



New streamlined layout! Easier to use! New files! Extra exclamation marks!

Dish some dirt at <MT0> today!

archon

Menu [ESC] = Utilities (inc. Talker & EXIT)

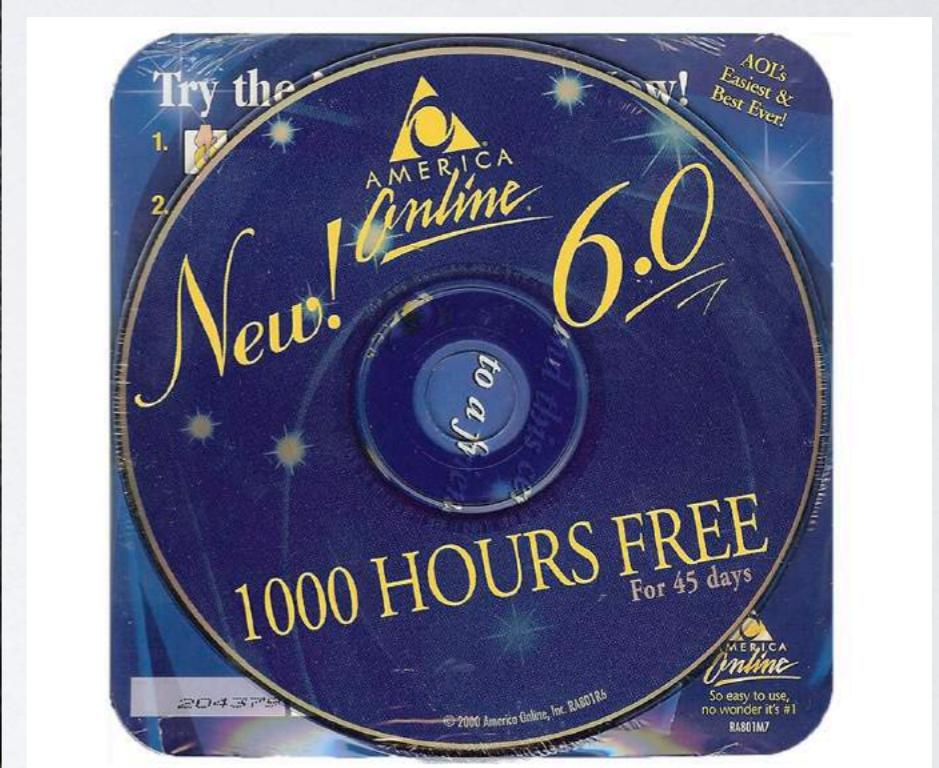
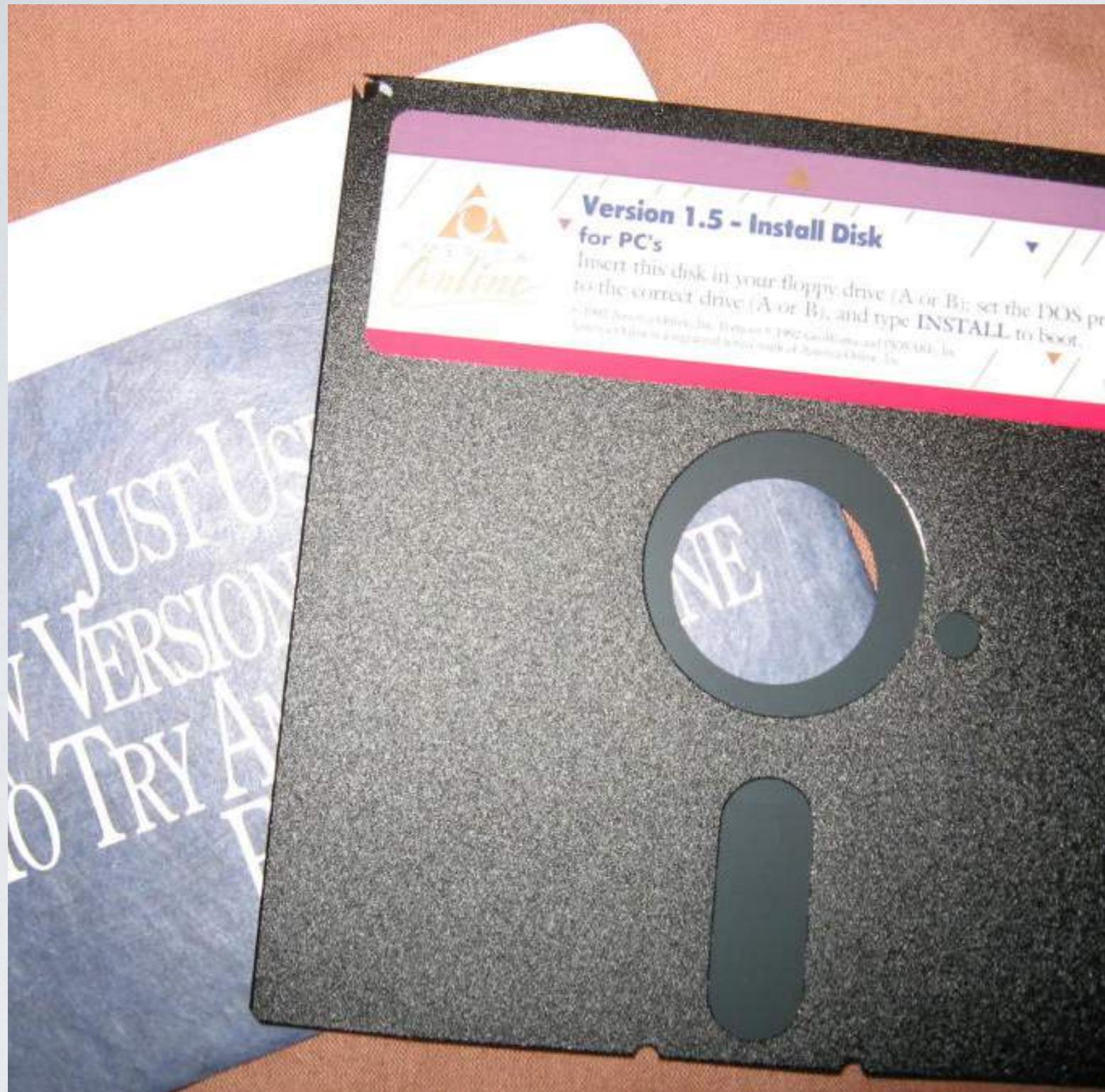
You don't use ssh. Booo! Menu [I] = Help and Information on Monochrome

Welcome to

Menu [N] = News and Media

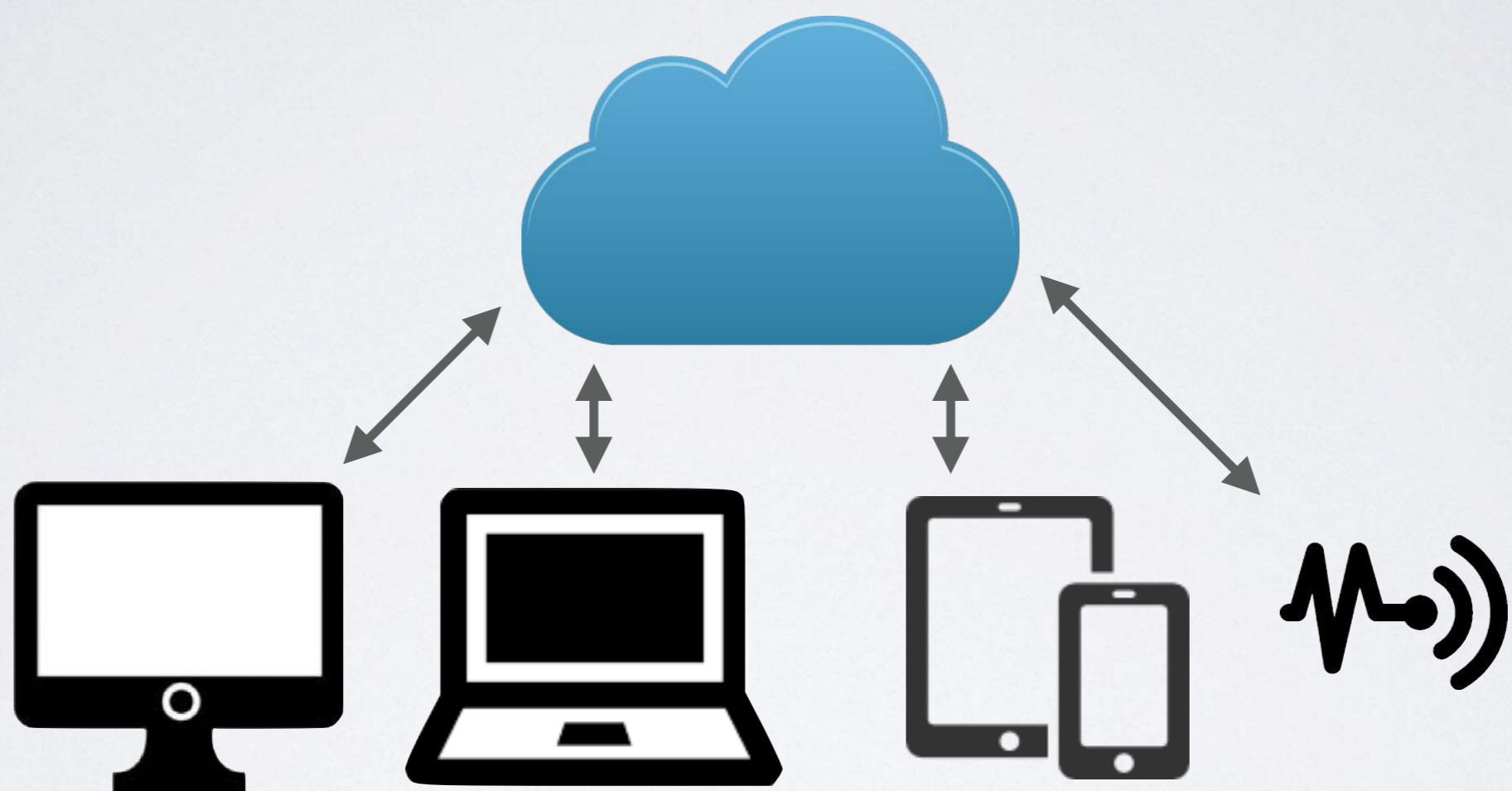
BULLETIN BOARDS

Hello 'SexDrugs&DrumMachinesForAgRaveGeneration'. (evilandi:4)
<< 22 other users at Sun Jan 11 19:30 BST >>



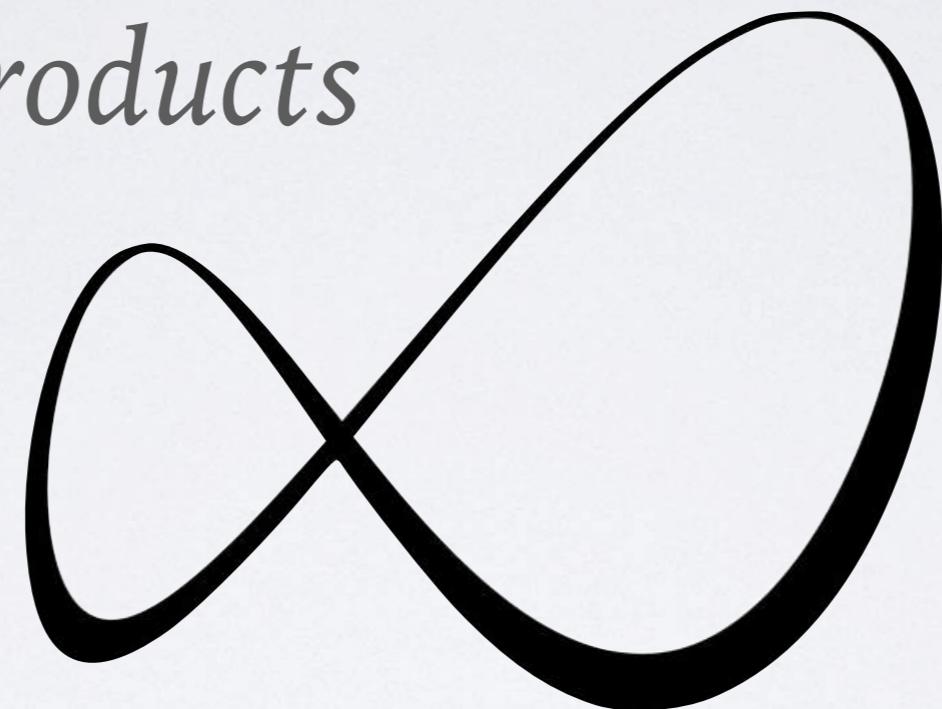
AOL a Billion Hours Free



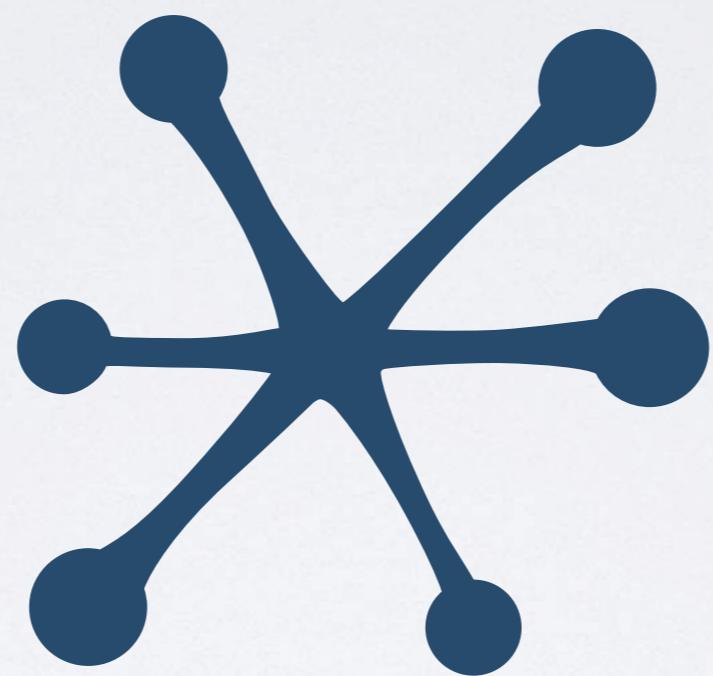


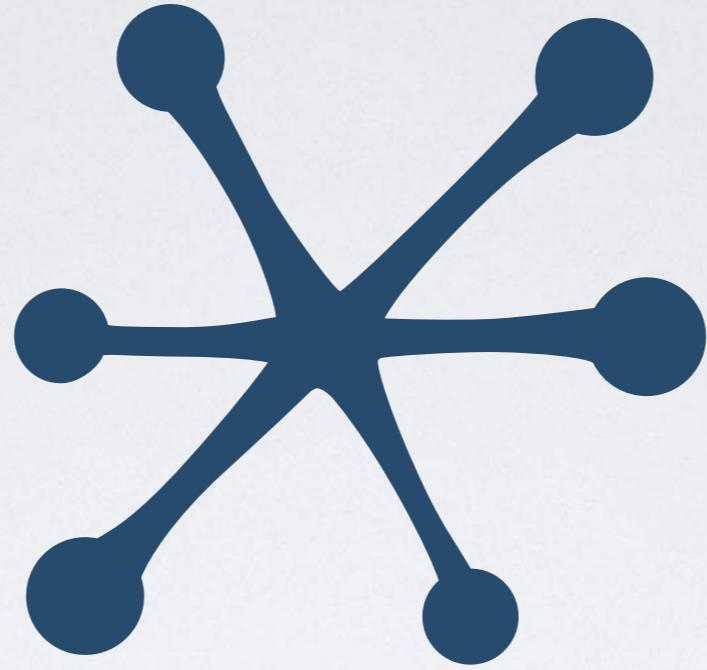
Web Development

Hardware Products

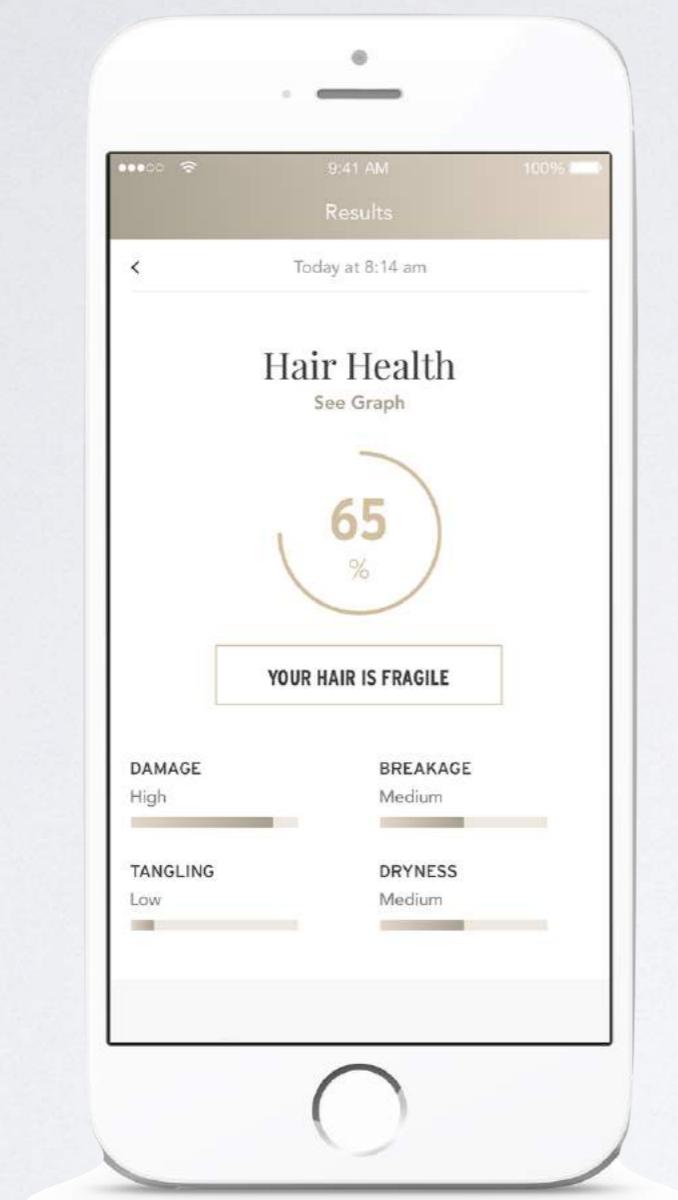


Application Software

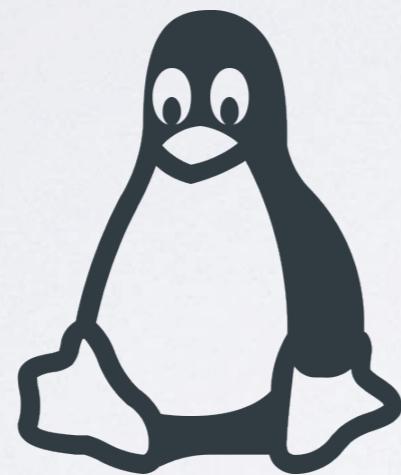




What Is Nerves?

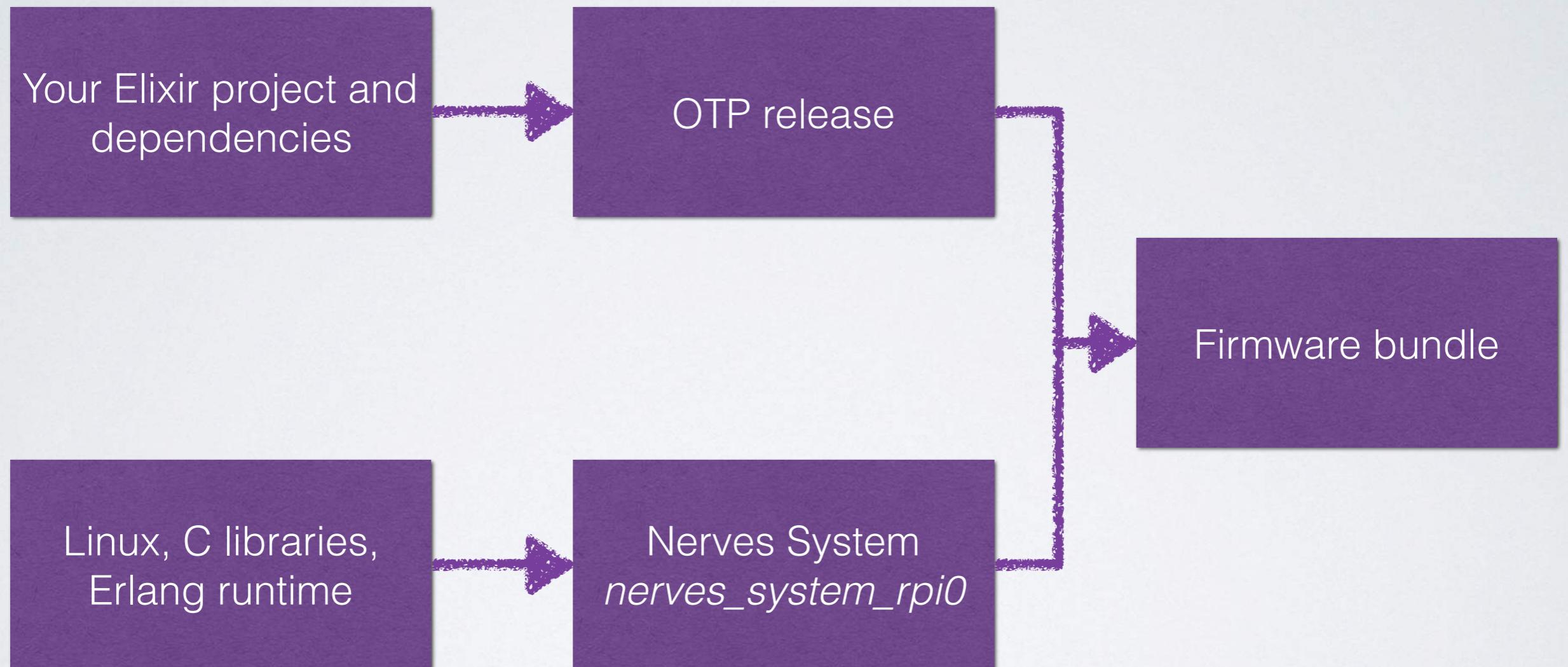


What Is Nerves?

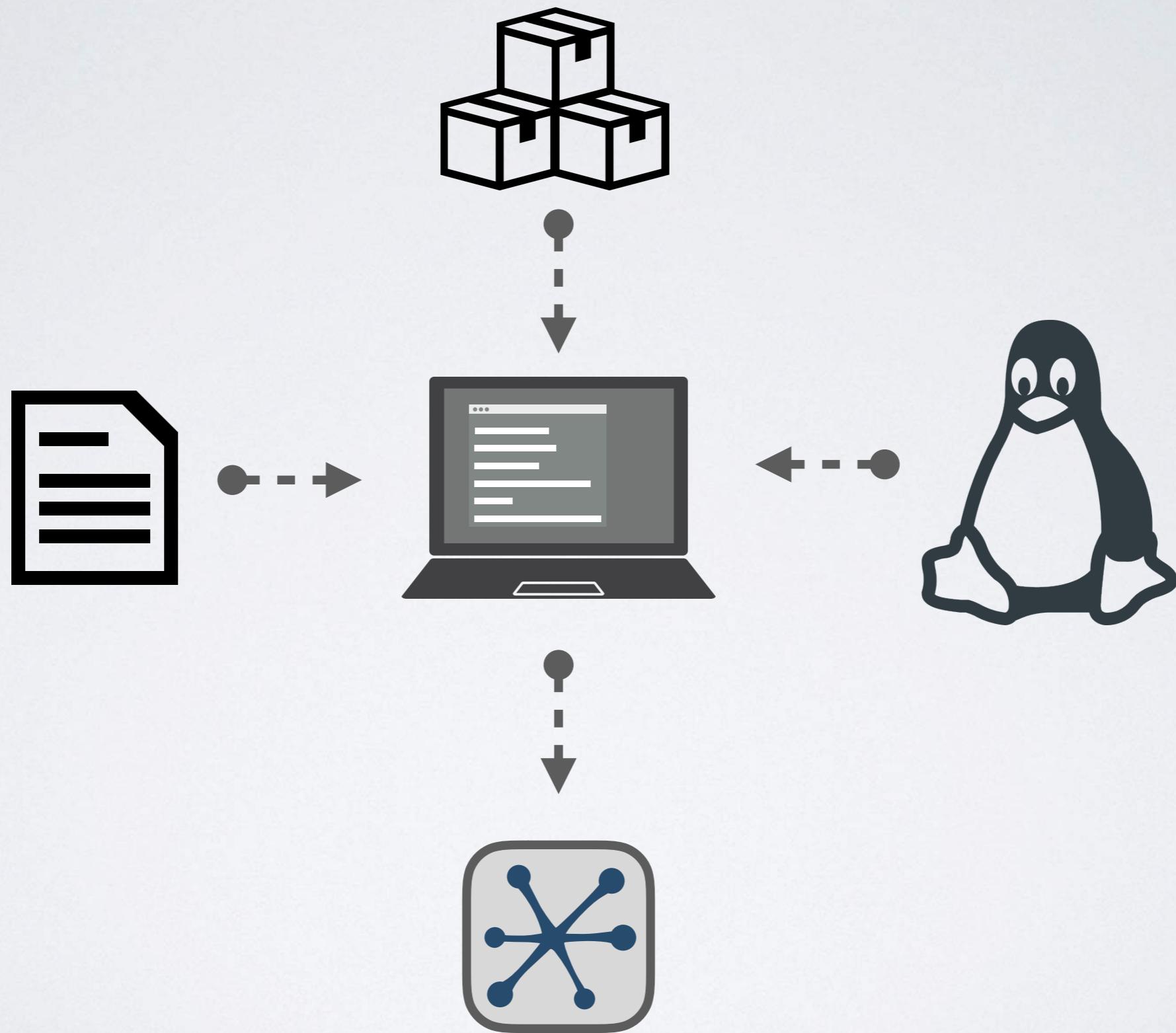


+ [e]

What Is Nerves?



What Is Nerves?



What Is Nerves?



What Is Nerves?

Nerves Systems

- Raspberry Pi 1, 2, 3, 3 B+
- Raspberry Pi Zero / Zero W
- BeagleBone Black / Green
- Lego EV3

What makes Nerves
great for embedded?

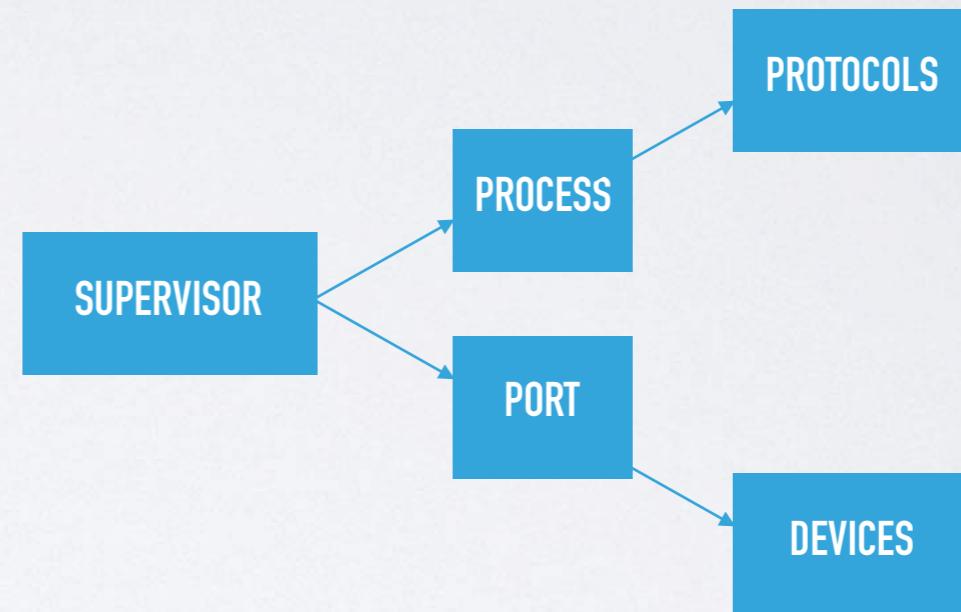


Elixir



Elixir

Fault tolerant





Elixir

Pattern Matching

`<<0x00, chunk :: utf8, _ :: binary>>`



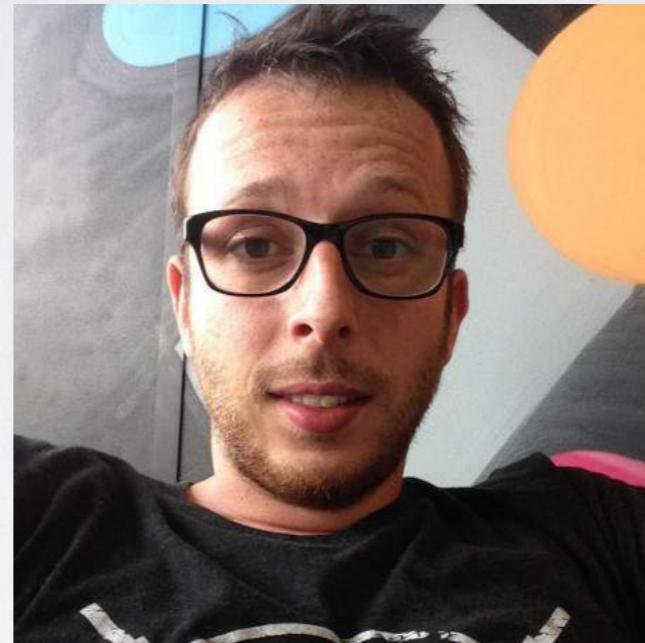
Elixir

Connectivity



A large, steampunk-style mechanical dragon is breathing a massive, bright orange and yellow flame from its open mouth. The dragon's body is made of dark metal plates and mechanical components. In the background, there's a clear blue sky with some white clouds.

FOR MAKERS



Loic Vigneron

<https://github.com/elicopter>

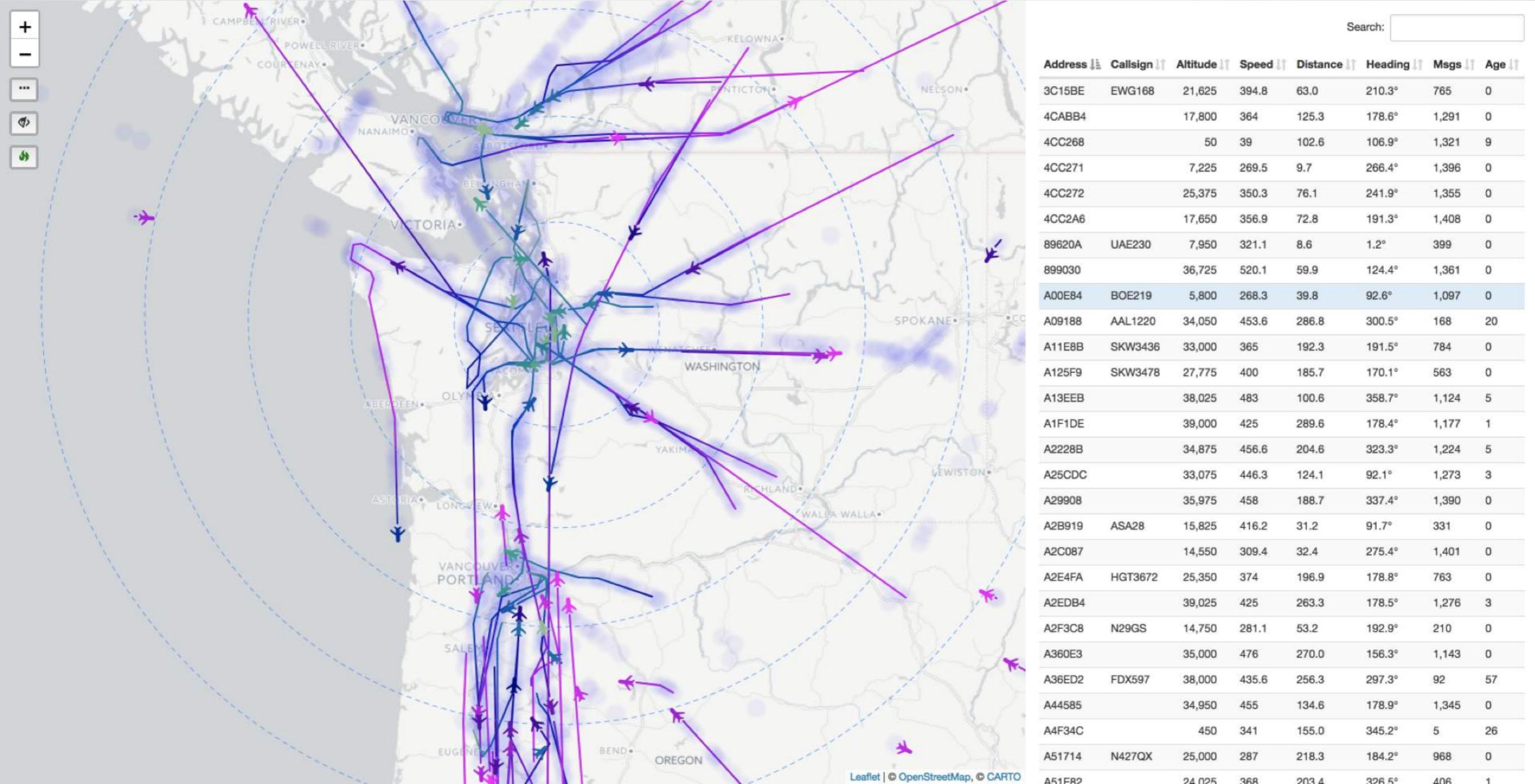


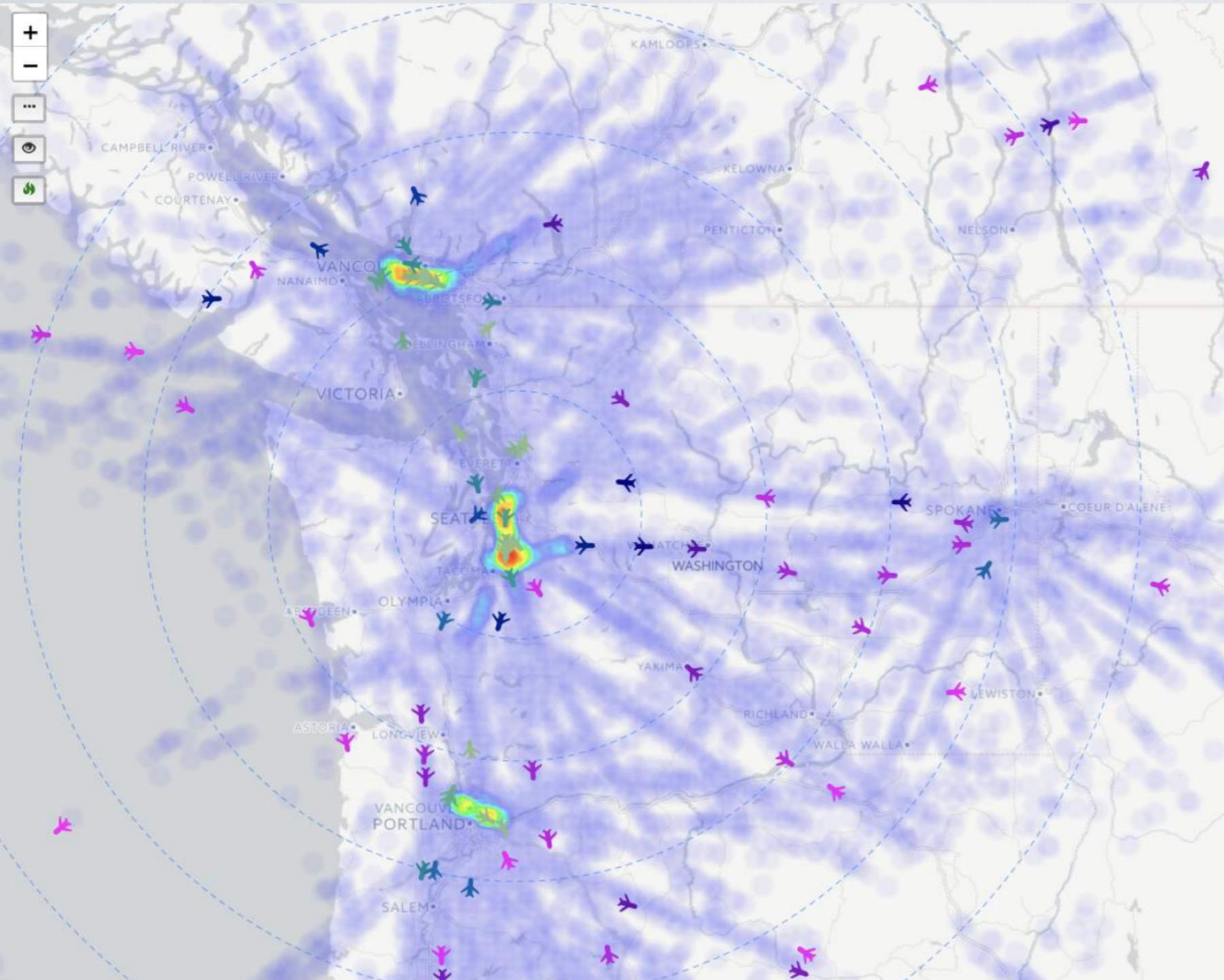
<https://github.com/elicopter>



Jeff Smith

github.com/electricshaman/squitter





Search:

Address	Callsign	Altitude	Speed	Distance	Heading	Msgs	Age
3949F9		-50	130	103.0	101.9°	622	10
3C4AD7		1,525	160	7.3	180°	637	11
7580F0	PAL118	19,300	386.2	152.6	88.4°	175	11
780CB7		37,000	466.4	111.7	168.5°	618	9
780E99	CHH495	9,150	285	25.3	164.7°	560	10
780FDA		38,975	458	231.4	168.9°	351	1
781094		7,500	245	119.9	147.2°	396	9
A00551	N100GG	36,000	353.1	265.5	284.4°	394	10
A02412	AMF1984	8,900	217	295.5	212°	82	10
A04B04		8,700	162	145.2	196.4°	105	23
A0AD24		1,550	163	7.4	180.4°	629	10
A0CAB1	BOE600	36,975	407	93.1	159.4°	574	10
A0F7C1		34,000	499.2	145.9	91.6°	519	10
A18CE8		38,000	442.6	196.0	265.1°	375	10
A1D059		33,875	463.3	141.3	116.4°	503	9
A1D873		6,050	264.1	20.4	162.6°	74	10
A1E302		32,725	441	98.3	176.5°	552	9
A26093		21,450	382.1	159.2	271.3°	146	11
A28DE3		32,675	421	99.4	185.4°	596	9
A29551	ASA717	29,225	457.4	99.9	310.7°	294	10
A2C087		33,000	453.1	106.2	104.8°	620	10
A2EFAE		31,650	492	224.3	357.7°	131	8
A3970F		37,750	435	178.4	178.6°	663	9
A3E618	N350PF	3,550	182	123.5	17.5°	208	10
A3FE3A		1,100	105.1	73.6	50.4°	298	23
A42A72		12,250	147.1	46.8	200.3°	533	10
A48AE7	HAL29	39,000	443	220.6	230.1°	476	9
A491E3		24,175	317	216.9	110.7°	220	10
A5320B		20,150	414.9	50.1	275.5°	645	10



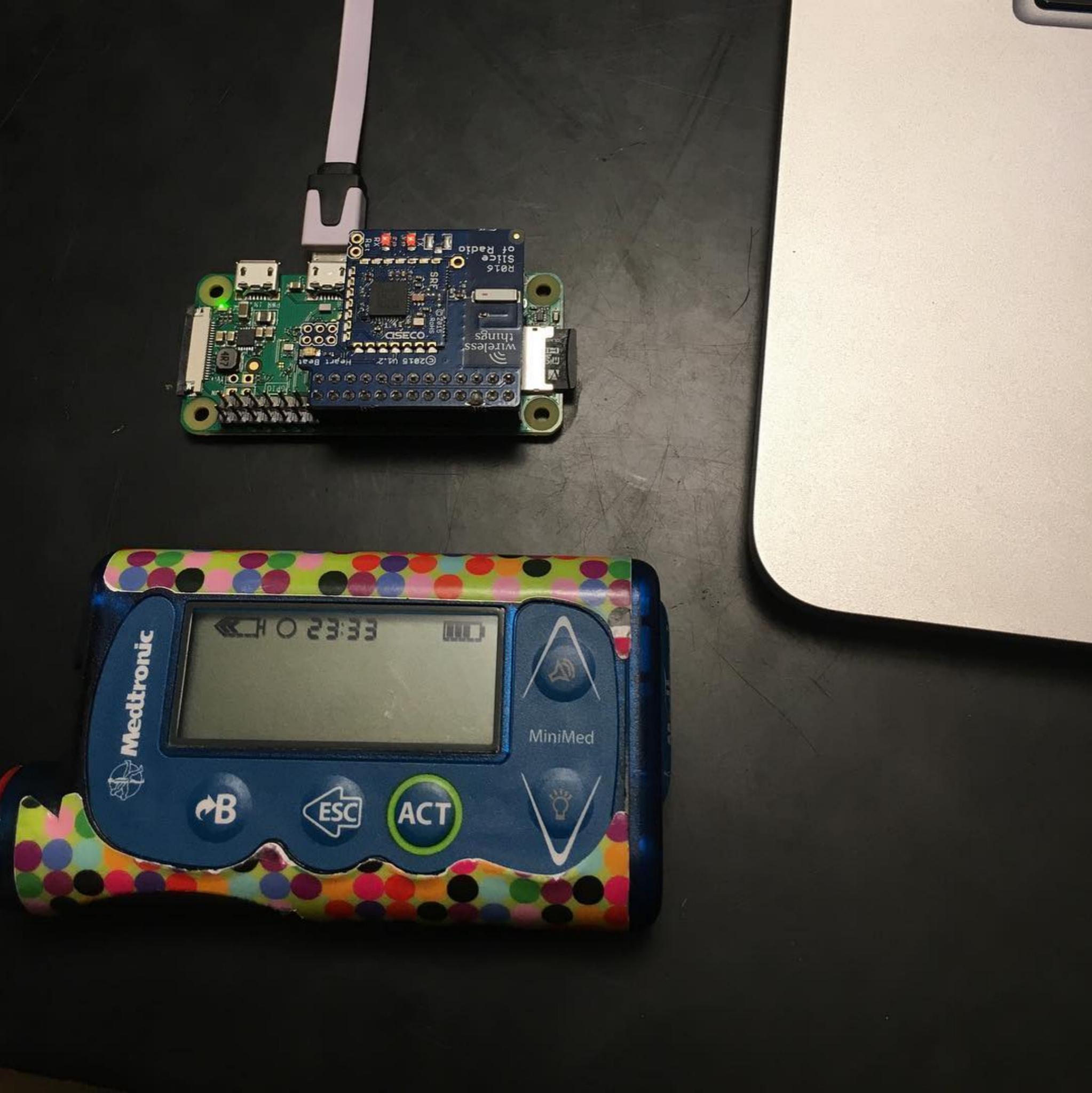
James Smith





Tim Mecklem





A photograph of a brewery at night. The building features large windows that look out onto a courtyard where several people are gathered around tables. Inside, the brewery's industrial equipment, including large vats and pipes, is visible. A red "STOP" sign is mounted on the exterior wall near the windows.

FOR PRODUCTION

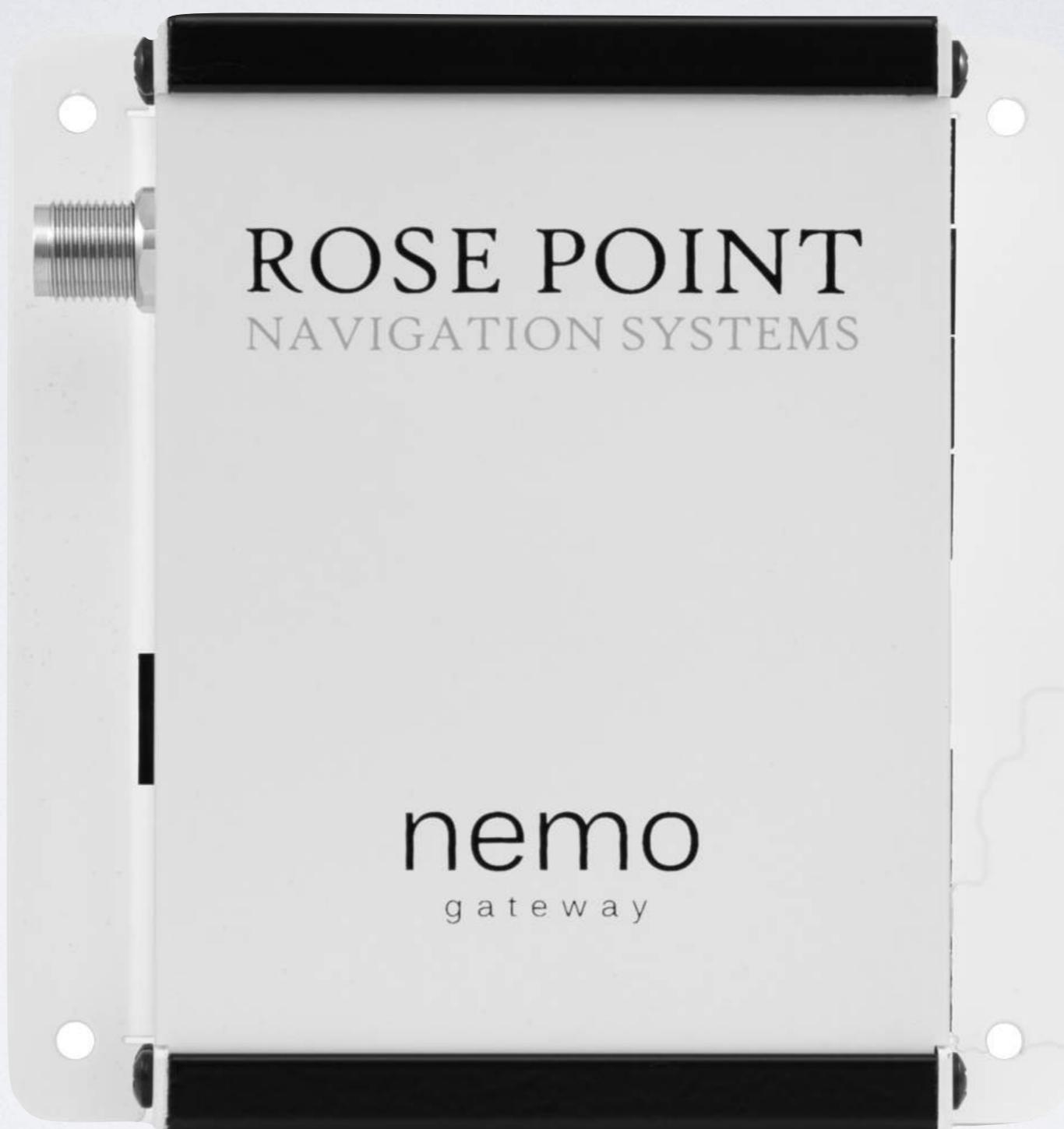
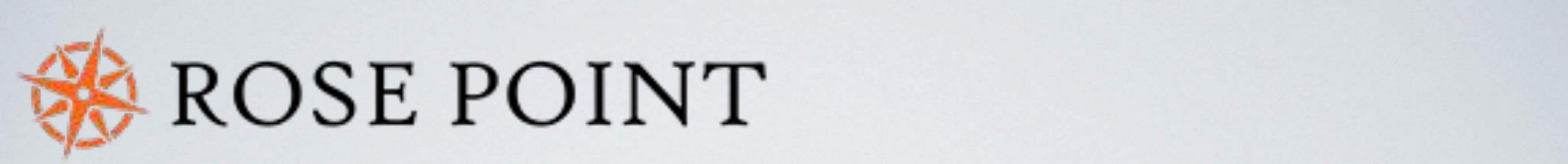
L E T O T E

L E T O T E





ROSE POINT





NATIONAL
ASSOCIATION *of*
REALTORS®

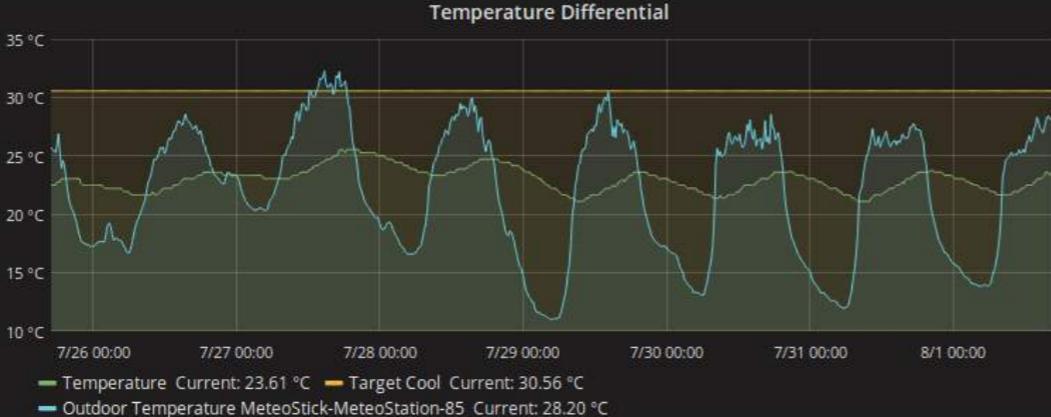


NATIONAL ASSOCIATION *of* REALTORS®

Current energy use

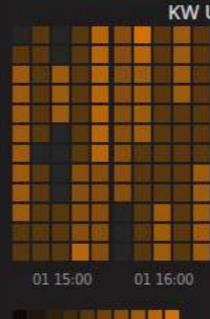
0.283 kWh

Temperature Differential



KW Usage

>Last 2 hours



HVAC Mode

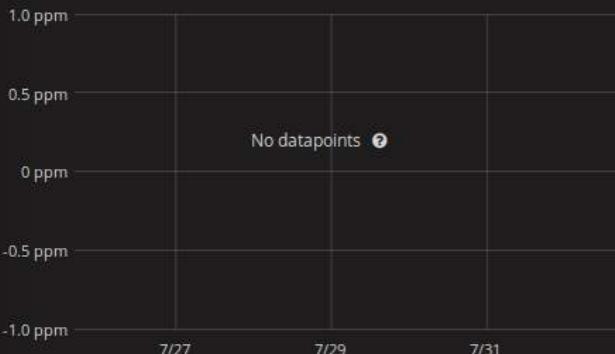
cool
off

Mode	State
cool (93%)	off (7%)

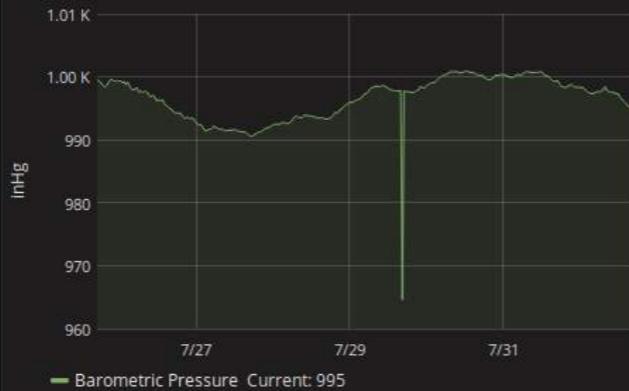
Mode: cool (93%) off (7%)
State: off (93%) (7%)

IEQ

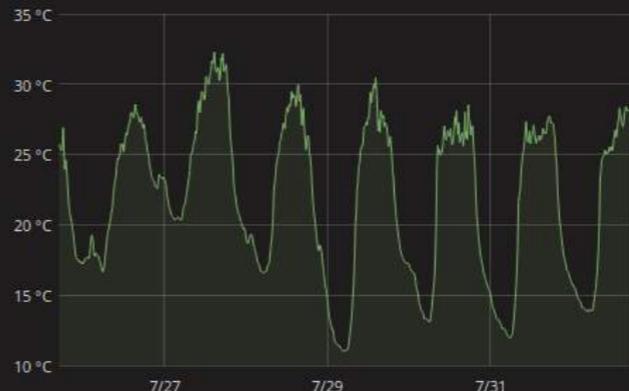
No datapoints ⓘ



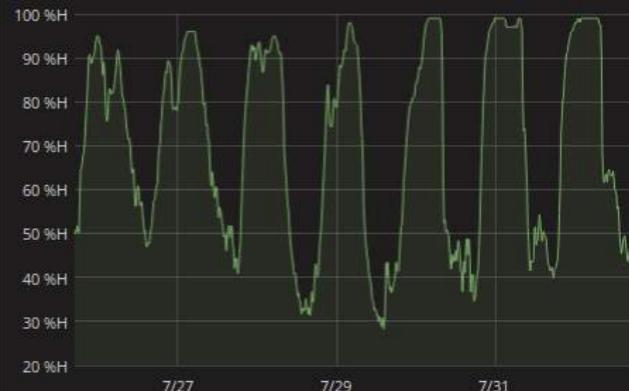
Barometric Pressure



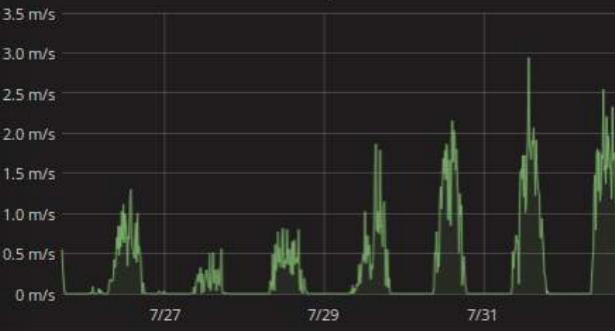
Temperature



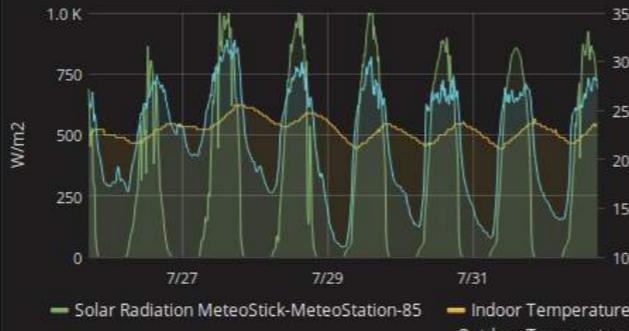
Humidity



Wind Speed



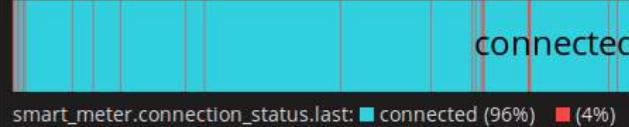
Solar Radiation



Rain Fall



SMCD Connection Status



Current Temperature

75 °F

Temperature Set Point

87 °F

HVAC Runtime









smarrent

smartrent

Unit A102

Model

Orchard Valley Condos

← Back

Overview |

Access

Scenes

Automations

Schedule

Energy

Activity

Rooms

Residents

Hub

Admin

Unit A102 Overview

Unit Status

Occupied

Hub Status

ONLINE

Connection Type: LAN

Device Health

75% ONLINE

4 ONLINE 2 OFFLINE

Usage by Device Type

Legend:

- Door Lock
- Outlets
- Switches
- Dimmers
- Thermostat

Unit Devices

	Front Door	88% Battery	ONLINE
	Overhead Dimmer		OFFLINE
	Living Room		ONLINE

Getting Started

Getting Started

<https://hexdocs.pm/nerves/1.0.0-rc.1/getting-started.html>

The screenshot shows the Nerves documentation website. On the left, there's a sidebar with the Nerves logo (a stylized network node icon), the text "Nerves v1.0.0-rc.1", and a search bar. Below the search bar are links for "PAGES", "MODULES", and "MIX TASKS". Under "PAGES", there are several sections: "API Reference", "Installation", "Getting Started" (which is currently selected, indicated by a purple vertical bar), and sub-sections like "Top", "Introduction", "Common Terms", "Creating a New Nerves App", "Building and Deploying", "Firmware", and "Nerves Examples". Other pages listed include "Frequently-Asked Questions", "Targets", "Systems", "User Interfaces", "Advanced Configuration", and "Updating Projects". At the top right of the main content area is a "Toggle Sidebar" button. The main content area has a dark background and features a large title "Getting Started" and a sub-section "Introduction". The text explains that Nerves is a new way to build embedded systems using Elixir, designed for embedded systems rather than desktop or server systems. It describes the three parts: Platform (a customized Linux), Framework (ready-to-go Elixir modules), and Tooling (command-line tools). A final paragraph states that these components together provide a specialized environment for building advanced embedded devices. Below the introduction is a section titled "Common Terms" which lists various terms used in the documentation.

Getting Started

Introduction

Nerves defines an entirely new way to build embedded systems using Elixir. It is specifically designed for embedded systems, not desktop or server systems. You can think of Nerves as containing three parts:

- Platform** – a customized, minimal Buildroot-derived Linux that boots directly to the BEAM VM.
- Framework** – ready-to-go library of Elixir modules to get you up and running quickly.
- Tooling** – powerful command-line tools to manage builds, update firmware, configure devices, and more.

Taken together, the Nerves platform, framework, and tooling provide a highly specialized environment for using Elixir to build advanced embedded devices.

Common Terms

In the following guides, support channels, and forums, you may hear the following terms being used.

Getting Started

```
$ mix archive.install hex nerves_bootstrap "~> 1.0-rc"  
$ mix nerves.new my_project
```

Systems

```
# Specify target specific dependencies
def deps("host"), do: []
def deps(target) do
  [
    {:bootloader, "~> 0.1"},
    {:nerves_runtime, "~> 0.4"}
  ] ++ system(target)
end

def system("rpi"), do: [{:nerves_system_rpi, ">= 0.0.0", runtime: false}]
def system("rpi0"), do: [{:nerves_system_rpi0, ">= 0.0.0", runtime: false}]
def system("rpi2"), do: [{:nerves_system_rpi2, ">= 0.0.0", runtime: false}]
def system("rpi3"), do: [{:nerves_system_rpi3, ">= 0.0.0", runtime: false}]
def system("bbb"), do: [{:nerves_system_bbb, ">= 0.0.0", runtime: false}]
def system("linkit"), do: [{:nerves_system_linkit, ">= 0.0.0", runtime: false}]
def system("ev3"), do: [{:nerves_system_ev3, ">= 0.0.0", runtime: false}]
def system("qemu_arm"), do: [{:nerves_system_qemu_arm, ">= 0.0.0", runtime: false}]
def system(target), do: Mix.raise "Unknown MIX_TARGET: #{target}"

# We do not invoke the Nerves Env when running on the Host
def aliases("host"), do: []
def aliases(_target) do
  ["deps.precompile": ["nerves.precompile", "deps.precompile"],
   "deps.loadpaths": ["deps.loadpaths", "nerves.loadpaths"]]
end
```

Getting Started - Development



Power

Ethernet

Serial

github.com/nerves-project/nerves_system_rpi0

github.com/nerves-project/nerves_init_gadget

Demo

Getting Started - Touch Screens



github.com/LeToteTeam/kiosk_system_rpi3

Getting Started - X86



github.com/LeToteTeam/kiosk_system_x86_64

Getting Started

https://github.com/nerves-project/nerves_examples

The screenshot shows the GitHub repository page for `nerves-project/nerves_examples`. The repository has 186 commits, 6 branches, 0 releases, and 27 contributors. The latest commit was made by GregMefford on Oct 7. The repository contains examples for Nerves, including `blinky`, `hello_gpio`, `hello_leds`, `hello_network`, `hello_phoenix`, and `neopixel`. It also includes a `.travis.yml` file and a `README.md` file.

A couple small examples to demonstrate using Nerves

186 commits | 6 branches | 0 releases | 27 contributors

Branch: master | New pull request | Create new file | Upload files | Find file | Clone or download

GregMefford Move bootloader config before target-specific config (nerves PR 171) (#...)

Latest commit d899ffc on Oct 7

File	Description	Time Ago
<code>blinky</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>hello_gpio</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>hello_leds</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>hello_network</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>hello_phoenix</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>neopixel</code>	Move bootloader config before target-specific config (nerves PR 171) (#...)	a month ago
<code>.travis.yml</code>	Bring the examples current with Nerves 0.7 (#67)	3 months ago
<code>README.md</code>	Bring the examples current with Nerves 0.7 (#67)	3 months ago

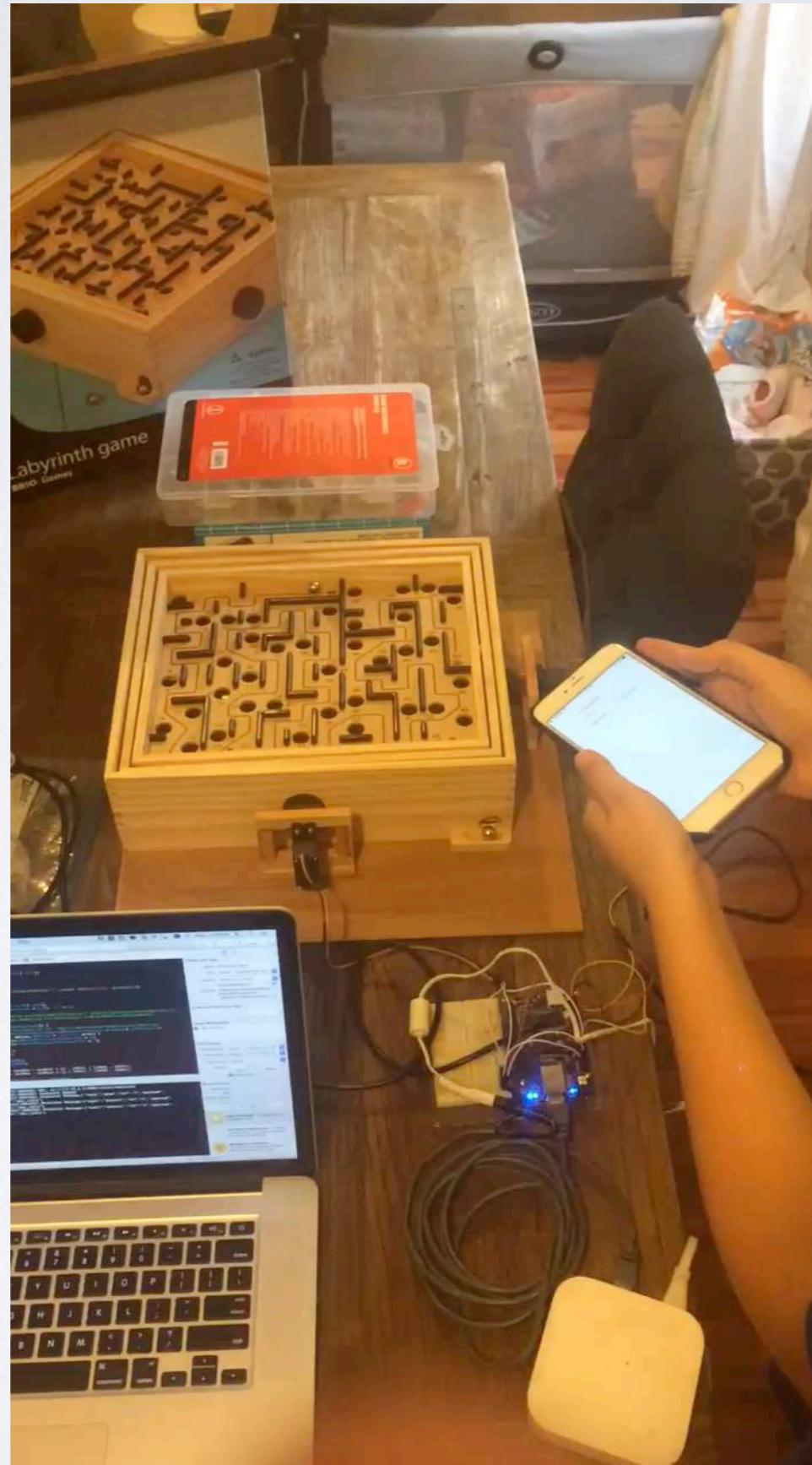
`README.md`

Nerves Examples

Getting Started - Phoenix Channels

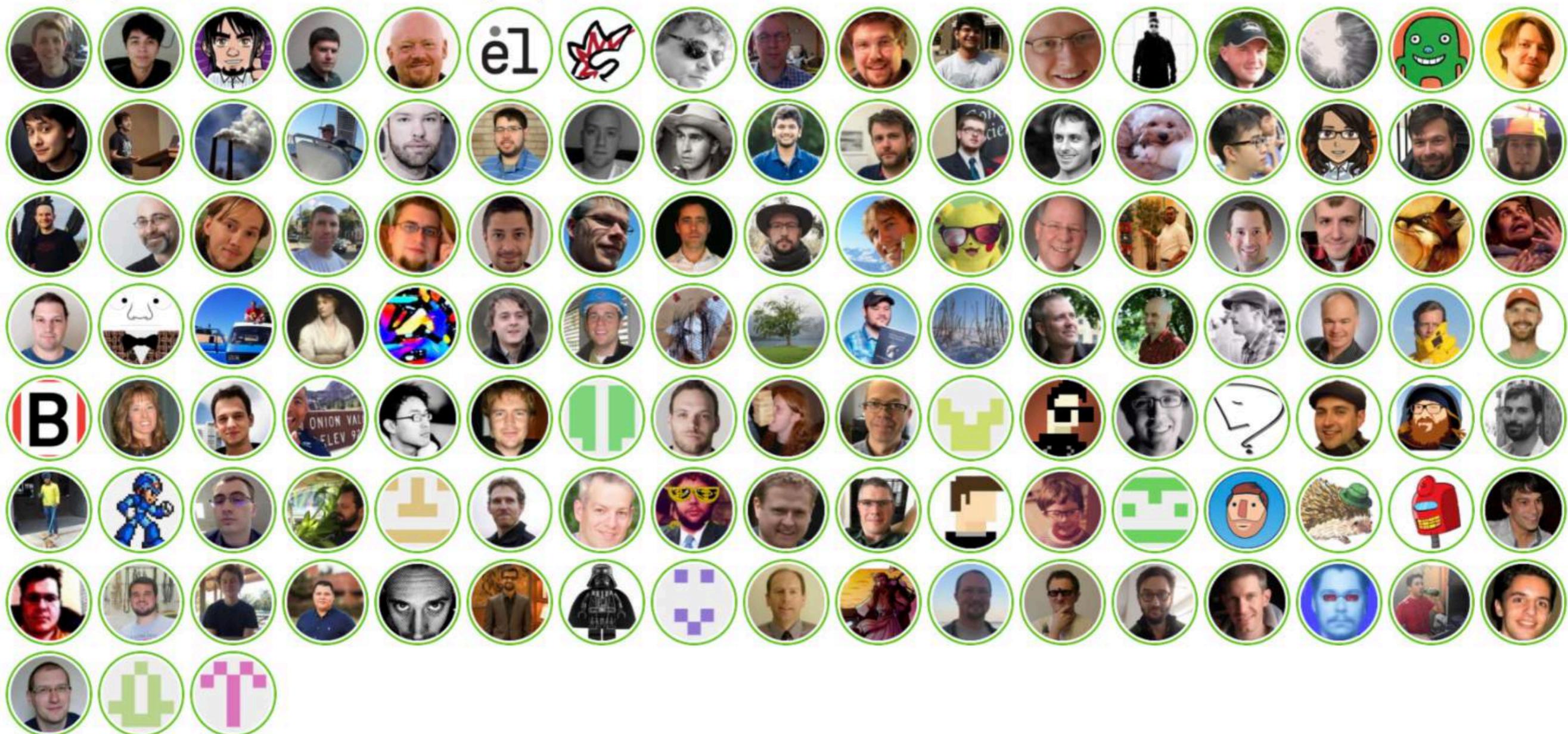


Getting Started - Phoenix Channels



Contributors

This project exists thanks to all the people who contribute.



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LE TOTE

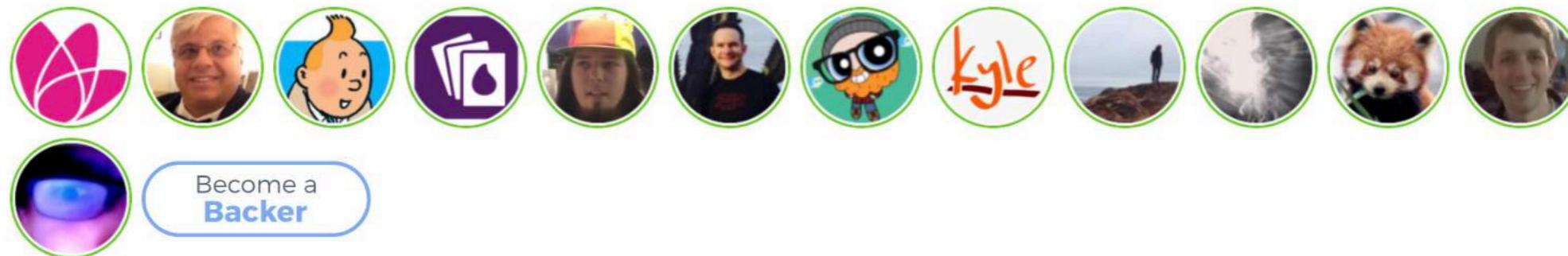
Silver Sponsors



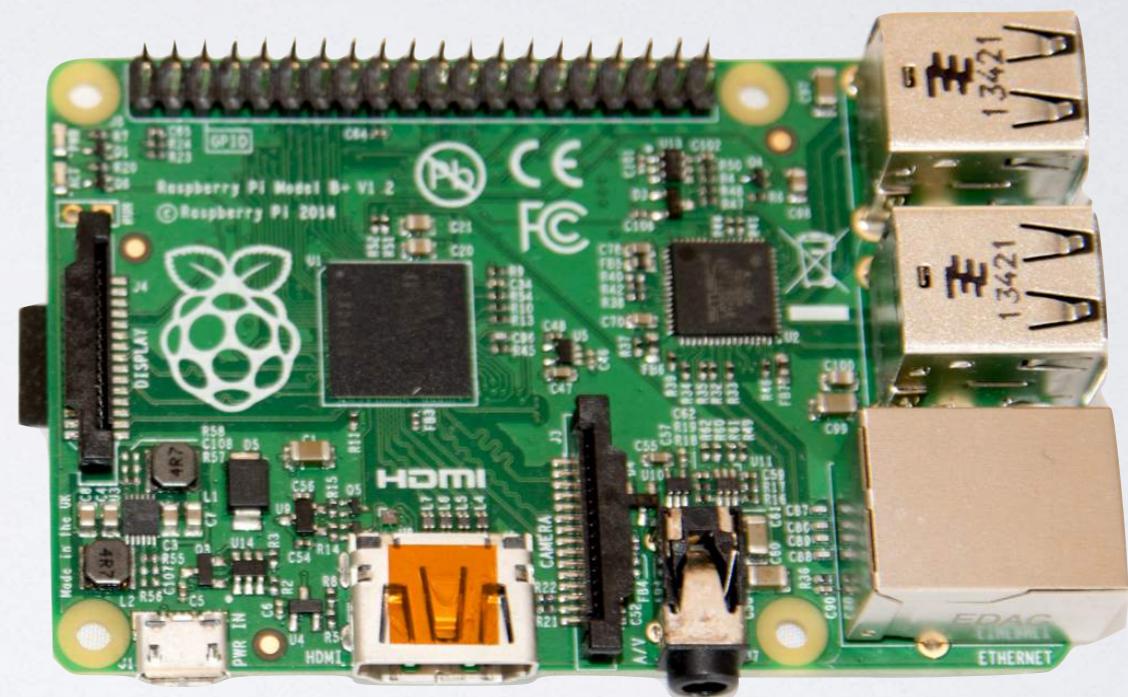
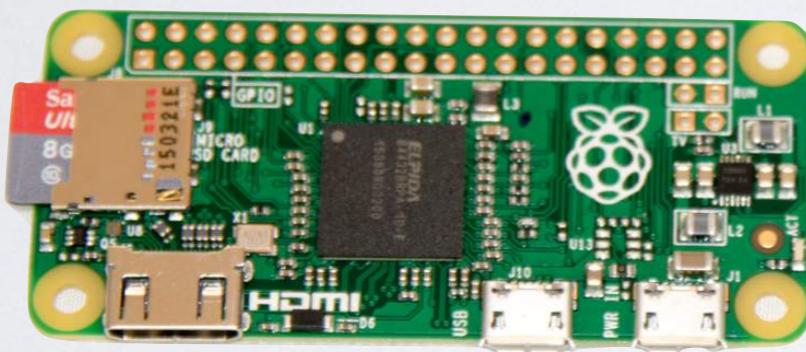
[\[Become a metal level sponsor\]](#)

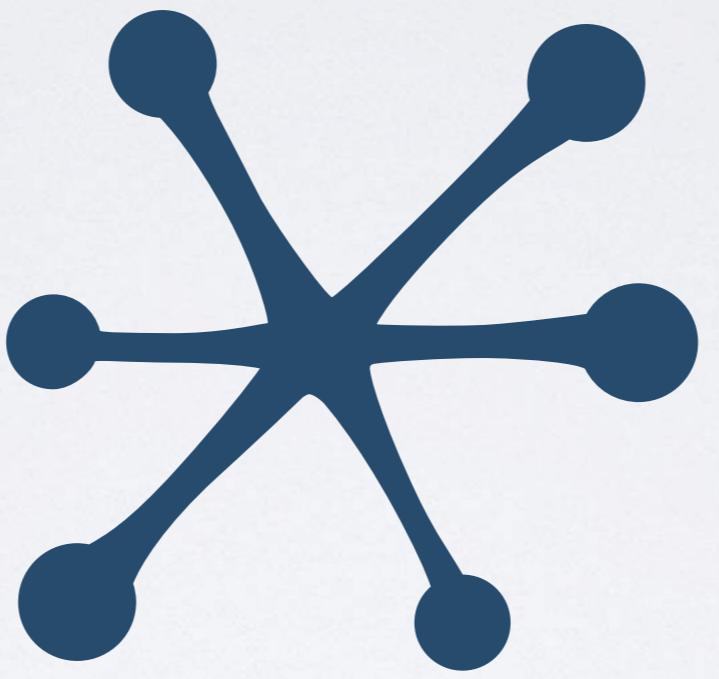
Backers

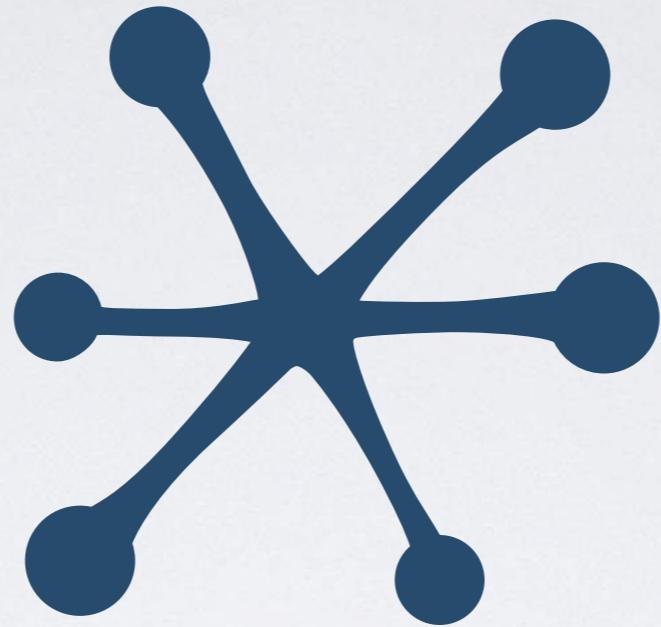
Thank you to all our backers! 🙏 [\[Become a backer\]](#)



2018







Thank You

Justin Schneck
@mobileoverlord