

GNU Radio

Project Update

Ben Hilburn

Unique Visitors

Total Unique Visitors

Last Month

69,311

Maximum Unique Visitors

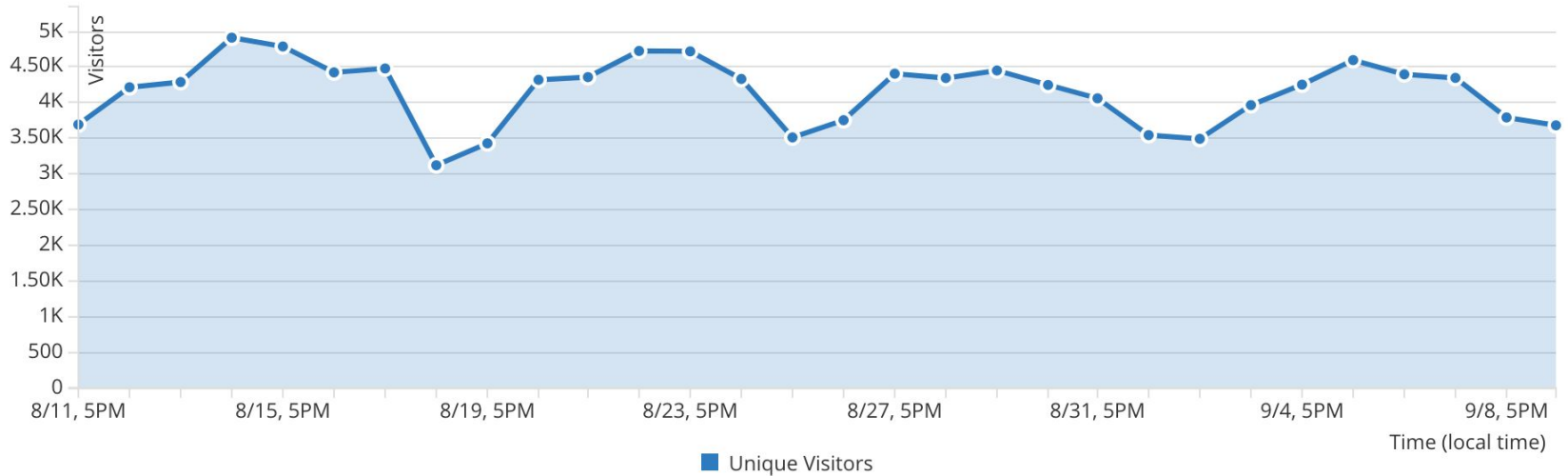
Last Month

4,898

Minimum Unique Visitors

Last Month

3,112



Participation in Software Coding Programs

- Google Summer of Code



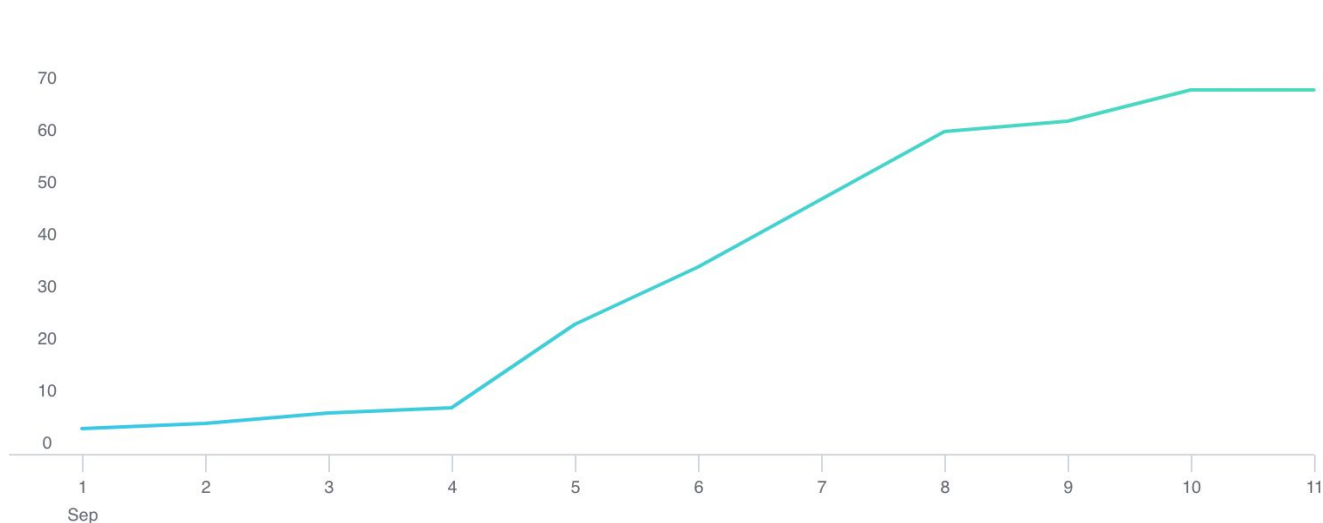
- Summer of Code in Space



European Space Agency

GRCCon17

- Another year of growth!
- Another year of everyone waiting until the last minute to buy their tickets!
- Discussion about next year needs to start soon!



Rohde & Schwarz Engineering Competition



Rohde&SchwarzCareers

@RSCareers

Follow



Bei der [#rscompetition](#) programmiert ihr auf Basis von [@gnuradio](#)! Jetzt anmelden und bis zu 3000USD gewinnen: bit.ly/2mJs2zw

Translate from German

Rohde & Schwarz
Engineering Competition

GNU Radio
Facts

founded
2001

programmed and
easily extensible in
C++ and Python

free and
open-source
software

[#rscompetition](#)

11:28 PM - 26 Apr 2017

Rohde & Schwarz Engineering Competition

Rohde & Schwarz Engineering Competition World League 2017

We present the winners of this year's Engineering Competition:

1st place: team 3-QAM from Karlsruher Institut für Technologie

2nd place: team Kommando Spektralkräfte from Karlsruher Institut für Technologie

3rd place: team MaGNUficent from RWTH Aachen

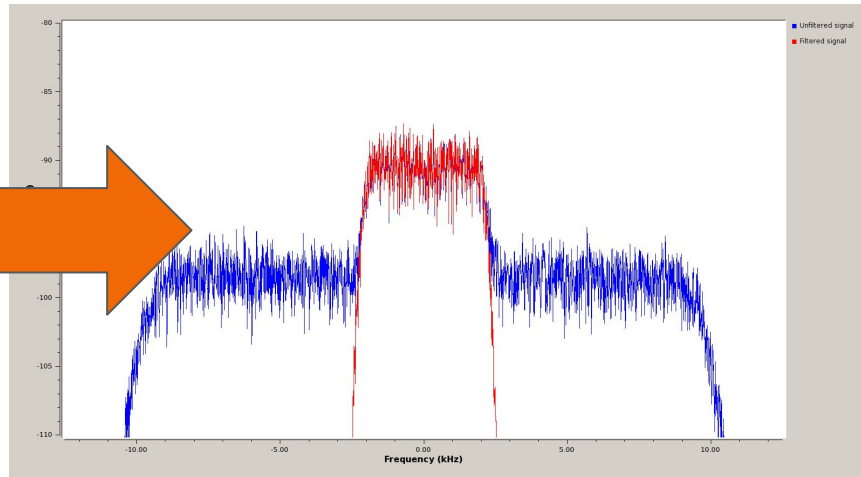
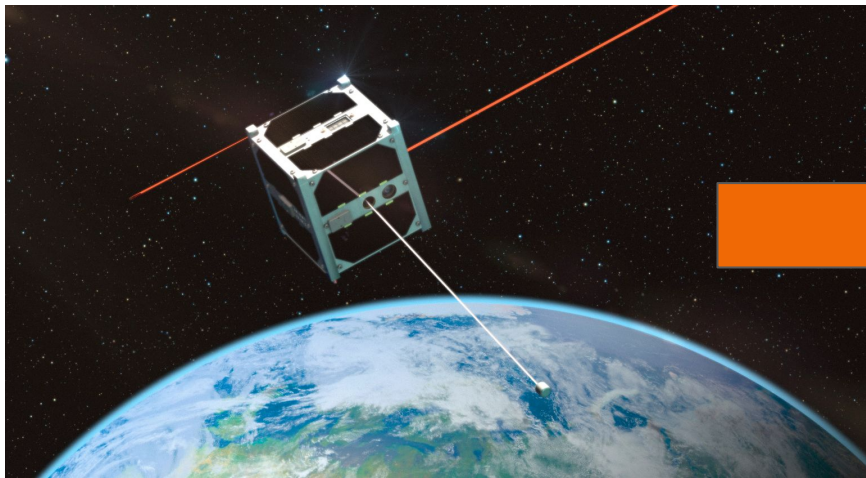
Congratulations to the winners!



Changes in the Developer Community

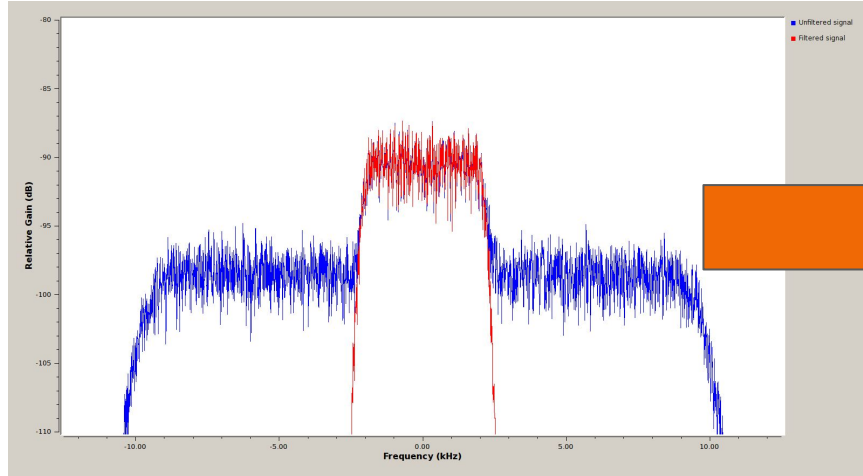
- Tons of GNU Radio development happening
- Most of it is in Out-of-Tree Modules

Reverse Engineering Outernet



Blog Post Walkthrough: <http://gnuradio.org/blog/reverse-engineering-outernet/>

Reverse Engineering Outernet



Amazon.com · Wikipedia · x

file:///home/daniel/free-outernet/topaks/Wikipedia/Amazon.com.html

Buscar

Amazon.com

From Wikipedia, the free encyclopedia

Amazon.com, Inc. (/ˈæməzɒn/ or /ˈæməzɑːn/), often referred to as simply **Amazon**, is an American electronic commerce and cloud computing company with headquarters in Seattle, Washington. It is the largest Internet-based retailer in the world by total sales and market capitalization.^[1] Amazon.com started as an online bookstore, later diversifying to sell DVDs, Blu-rays, CDs, video downloads/streaming, MP3 downloads/streaming, audiobook downloads/streaming, software, video games, electronics, apparel, furniture, food, toys and jewelry. The company also produces consumer electronics—notably Amazon Kindle e-readers, Fire tablets, and Fire TV—and is the world's largest provider of cloud infrastructure services (IaaS).^[2] Amazon also sells certain low-end products like USB cables under its in-house brand AmazonBasics.

Amazon has separate websites for the United States, the United Kingdom and Ireland, France, Canada, Germany, Italy, Spain, Netherlands, Australia, Japan, China, India and Mexico. Amazon also offers international shipping to certain other countries for which it professed an intention to launch its websites in Poland^[3] and Sweden.^[4]

As of 2016 is the most valuable retailer in the United States by market capitalization,^[5] and is as of 2016 is overall.^[6]

- 1 History
 - 1.1 Mergers and acquisitions
 - 1.2 Investment
 - 1.3 Subsidiaries
- 2 Board of directors
- 3 Merchant partnerships
- 4 Amazon Studios
- 5 Subsidiaries
 - 5.1 Audible.com
 - 5.2 Brilliance Audio
 - 5.3 ComXology
 - 5.4 Goodreads
 - 5.5 Shelfari
 - 5.6 Beijing Century Joyo Courier Services
- 6 Website
 - 6.1 Reviews
 - 6.2 Content search
 - 6.3 Third-party sellers
- 7 Amazon sales rank

amazon.com, Inc.

amazon.com

amazon.com homepage

Type of business Public

Type of site E-commerce

Available in English, French, German, Spanish, Italian, Chinese, Japanese, Brazilian Portuguese, Dutch

Traded as NASDAQ: AMZN (<http://www.nasdaq.com/symbol/amzn>) NASDAQ-100 Component S&P 5000 Component

Blog Post Walkthrough: <http://gnuradio.org/blog/reverse-engineering-outernet/>

Radio Astronomy



Arecibo



Jicamarca



Svalbard



Poker Flat



Tromsø



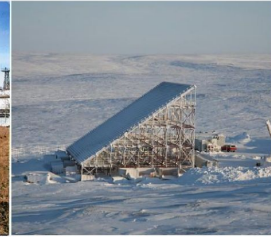
Millstone Hill



Kharkiv



Irkutsk



Resolute Bay



MIT

Images from Juha Vierinen's presentation:
Geophysical Remote Sensing with GNU Radio

Radio Astronomy

- Juha Vierinen's work at Haystack Observatory
 - Presented at [GRCon13](#): [slides](#), [video](#)
- National Radio Astronomy Observatory
 - Presented at Cyberspectrum 10: [Using GNU Radio for Astronomy Research, Public Outreach](#)
- Open Source Radio Telescope Project ([OSRT](#))
 - Building a community for open source radio telescopes
- Canadian Centre for Experimental Radio Astronomy ([CCERA](#))
 - Goal: Make something like this accessible to everyone





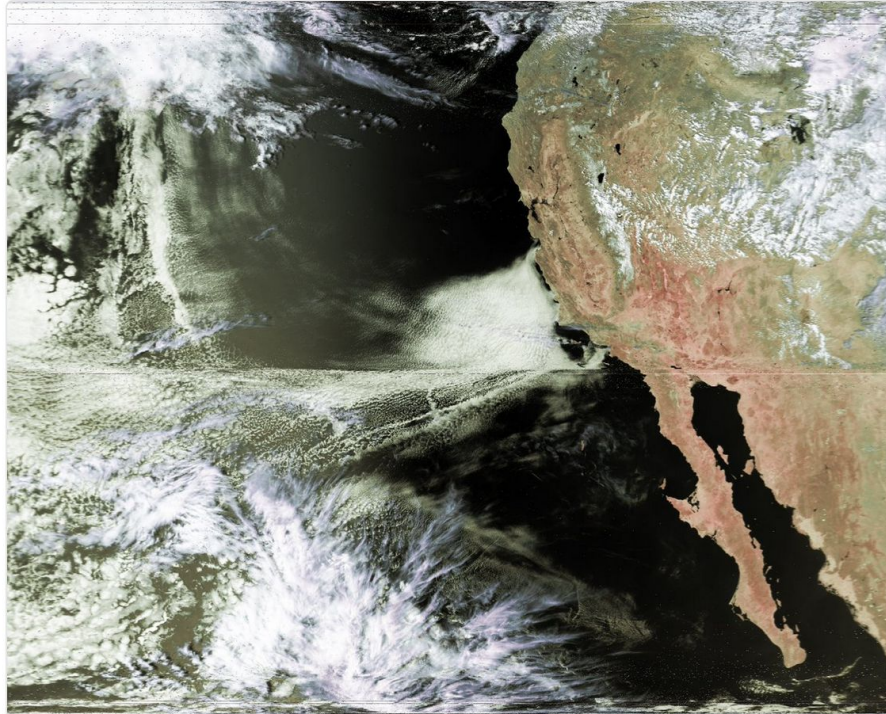
dev

@devnulling

Following



Starting to get good results from the tracking dish, not bad for a 39* pass NOAA-19 HRPT
i.imgur.com/Cfw9lpH.jpg



wat



For sale on Amazon, a hacking gadget that is a car thief's dream... and our team using it took just two minutes to break into this £100,000 Range Rover

wat



GNU Radio Tutorials at Shmoocon



Shmoocon 2017: Sniffing IR Signals and More! - Hak5 2120

16,204 views

385 9 SHARE ...



Hak5
Published on Jan 18, 2017

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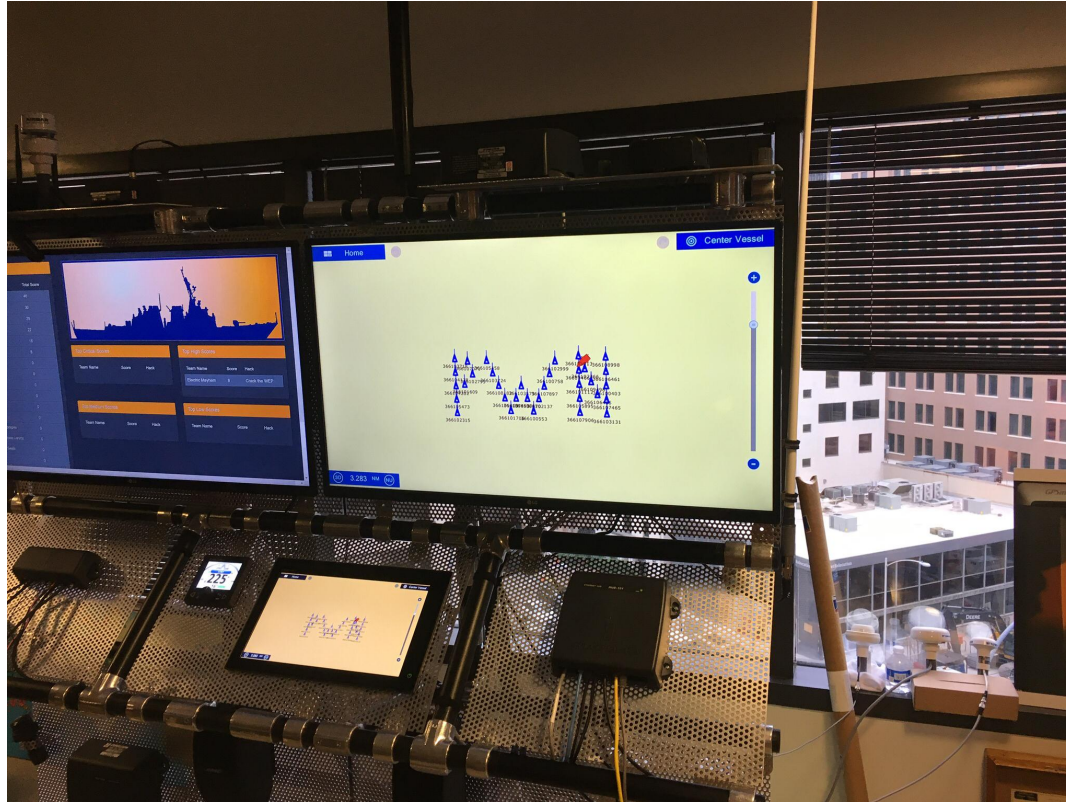
IDEAS

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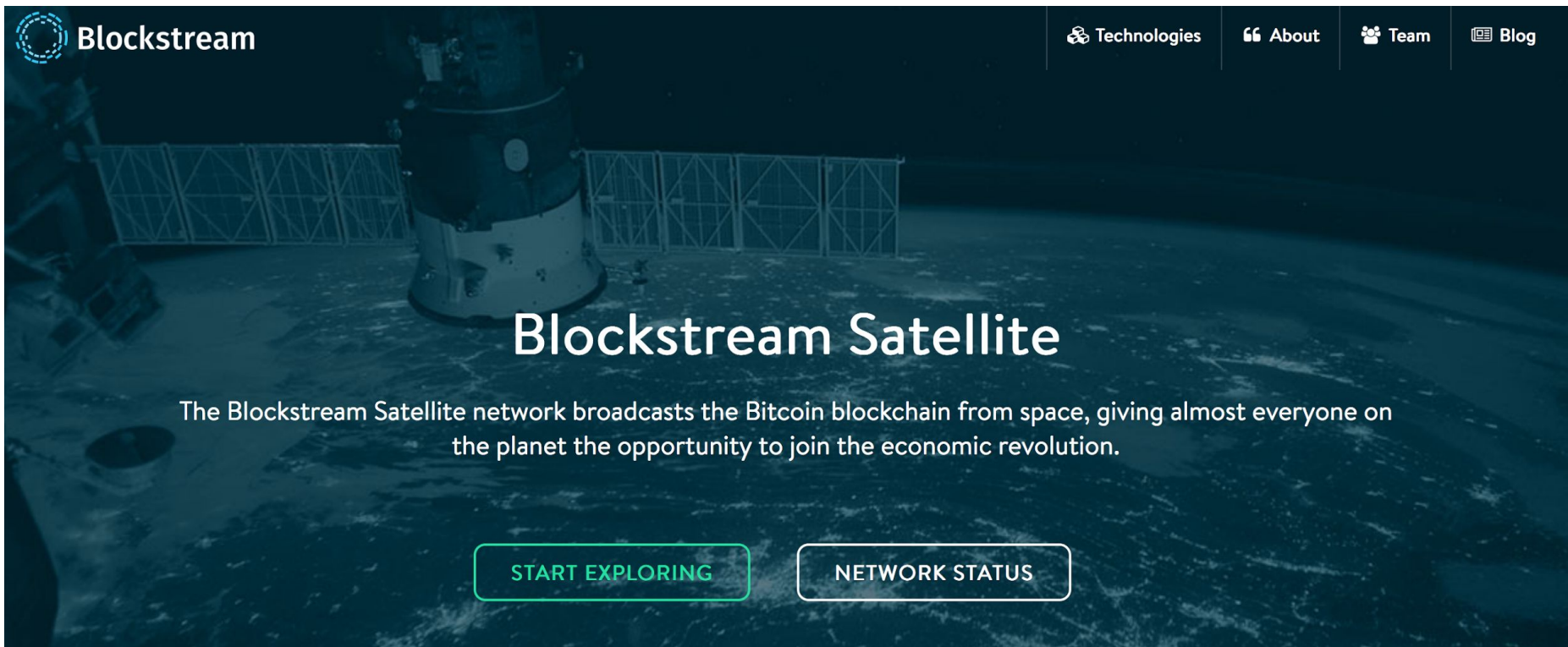
02.24.17


Navy Sends Out An H.O.S. Challenge—Hack Our Ship—To Woo Millennial Tech Talent

HACKtheMACHINE Winners



:btc:

The banner features a dark blue background with a satellite in space. The satellite has a central cylindrical body and two long, rectangular solar panel arrays extending horizontally. The Earth's horizon is visible in the lower right, showing a curved surface with white clouds. The overall tone is futuristic and technological.

 **Blockstream**

[Technologies](#) [About](#) [Team](#) [Blog](#)

Blockstream Satellite

The Blockstream Satellite network broadcasts the Bitcoin blockchain from space, giving almost everyone on the planet the opportunity to join the economic revolution.

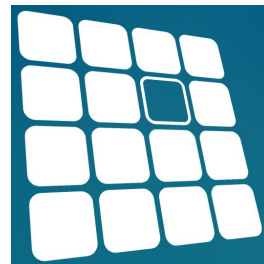
[START EXPLORING](#) [NETWORK STATUS](#)

Changes in the Developer Community

- Upside: High levels of community activity, exciting developments.
- Downside: GNU Radio's core suffering from less attention.

Broadening of the Community

- Most people use a variety of tools
- Starting to see this reflected more in the active participants



Broadening of the Community

- Most people use a variety of tools
 - Starting to see this reflected more in the active participants
 - GNU Radio is used:
 - Stand-alone
 - Part of a workflow
 - Paired with other tools
 - As a dependency for other tool
-
- GNU Radio is often the common denominator with other tools & communities

Our Major Challenges

- How do we support sustainable development for GNU Radio's core?
- How do we improve our code quality and stability?
- How do we lower the barrier-to-entry and make GNU Radio more accessible?

Parting Thought

GNU Radio is primed to really take-off if it gets the support it needs.

Goals:

1. Improve the accessibility & usability of software radio.
2. Provide a tool that can be used for the entire design cycle: simulation, in-the-loop prototyping, and deployment.
3. Make GNU Radio flowgraphs the standard model for software radio design.