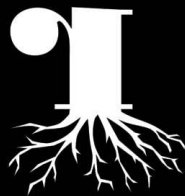# You did it!
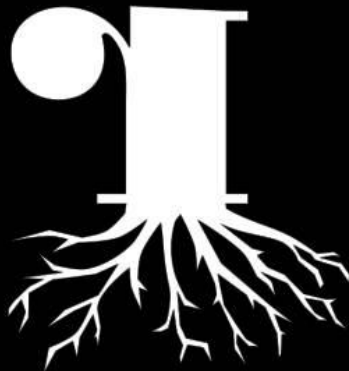
You find the link of the playlist with all the
videos of the first day of the conference

Get Ready!

Pull the latest changes from Git, grab some popcorn, and get ready to learn, discuss and share.. like we did in the good old days.
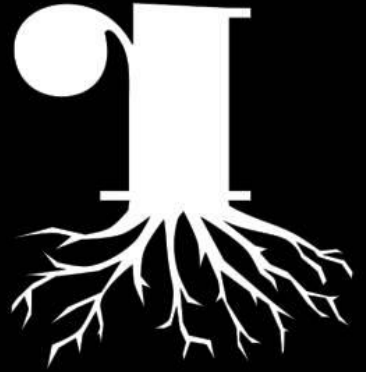
Let the r00ts grow again

The Best Conference in r2land!

It's a good opportunity to bring our digital selfs together for a couple of days to share the projects we've worked on this year.

"Almost 20 years later, it's not the resources that keep us going, but the roots — our community, our passion, our shared drive."

Introduction

Organizing a conference is a lot of work! But

- **People wants to share their passion**
  - Even if we can't meet IRL.
- **Online is easier and cheaper for everyone**
  - 2 fully packed days!
  - Join our YouTube/Discord/Telegram
  - Post in the fedi using #r2con2025

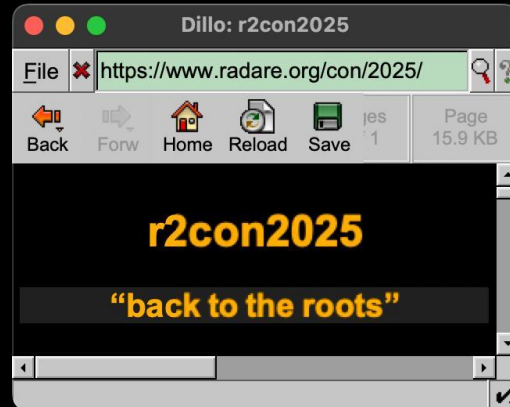Maybe next year we will make it physical!

Website

You'll find all the links to the talks

- Load the ICS into your calendar app
- And for the first time we are fully HTML/1.0
  - Dillo compliant!

Conference Music

Inspired by **r2ai**+**r2au** but made with Strudel

Thanks Neuroflip!

```
 _
O O  <  Let's make r2au dio!
```

```
# play <freq> <secs>
(pl; auws $0; au.; sleep $1)

# Am arp: A4-C5-E5-C5 (eighths)
(arpA; .(pl 440 0.25); .(pl 523 0.25); .(pl 659 0.25); .(pl 523 0.25))
# G arp: G4-B4-D5-B4
(arpG; .(pl 392 0.25); .(pl 494 0.25); .(pl 587 0.25); .(pl 494 0.25))
# F arp: F4-A4-C5-A4
(arpF; .(pl 349 0.25); .(pl 440 0.25); .(pl 523 0.25); .(pl 440 0.25))
# E arp: E4-G#4-B4-G#4
(arpE; .(pl 330 0.25); .(pl 415 0.25); .(pl 494 0.25); .(pl 415 0.25))

# Two bars per chord
(block; 2.(arpA); 2.(arpG); 2.(arpF); 2.(arpE))

# Loop blocks
8.(block)
```

Source Changes

👀

Comparing 5.9.6 to 6.0.4

- 6.0 introduced major API and development changes
- Finally autoformatting code! Clang-format-radare2

Breaking ABIs for the common good

- Offset -> Addr (json and apis)
- RCons take instance parameter
- Redesigned Parse APIs
- New Muta Library combines charset, crypto and hash apis

Saving Progress: Projects

Still in the back burner, requested improvements since..
Forever?

- New binary projects format on the works as a plugin
  - Not yet enabled by default
- Export all flags as DWARF for elf and macho!
- Flags store mangled, demangled and flag names
- Data types and analysis metadata stored

Help us test!

Apple Support

Main highlights introduced this year

- **iOS26** – Latest Dyldcache, IOKit Support
- Improved **Swift** demangler (pure C)
- Detect **VisionOS** binaries
- macOS classic binaries (**PEF**) for m68k and powerpc
- Large Fat Machos (>**4GB** executables load fast)
- CI signs the **DMGs** and **Brew** distributes Iaito too

More Architectures!

Some new architectures and platform support!

- **UEFI**, Better WASM and Plan9 on RISC-V
- Pseudodisassemble **all** the architectures
- **VAX**, MSP430, SBPF (Solana BPF), TMS320 (C6x), SNES, **TriCore**, **STM8, COSMAC 1806.**
- Assemble more instructions for m68k, x86, arm and arm64

Packaging

Kudos to **plue** (Pau RE) for the packaging contribs

Kudos to **satk0** for the subprojects refactoring

- Iaito finally hits brew!
- Mac DMGs are now signed in the CI
- Several CI improvements easing maintainance
- Reproducible and Offline builds
- Some XDG standard fixes
- Flatpak and Snap support Qt6 and latest r2g/r2f
- Custom lz4 preferred to avoid distribution
- Several r2pm improvements

Future 👀

- Eliminate Global States (Towards Thread safety)
  - RCons methods take an instance
- Automatic flagspaces, import classifications
- Revamped support for forensics and remote FileSystems
- R2pipe over POST http
- New Visual modes for FS and Analysis information
- Improved memory allocation
- Faster ESIL, ongoing refactoring for proper var analysis.
- New C parser - tinycc is now a plugin

Plugin Ecosystem

R2Ghidra has been synced with latest GHIDRA code

R2Frida got breakpoints (sw/hw), observe threads and modules

- Native TypeScript and r2frida-pm dep installer
- Fixed remote filesystem support

Iaito got stable release builds for all platforms

- Integrated r2ai, and Decai, r2pm frontend
- Handle visual marks and HJKL keys in disasm/hex/graph
- Added IO Maps, FS, Art widget
- Relative to symbols/flags instead of addresses
- Editable colors, comments flags in hexdump
- Better looking listings, improved defaults

AI Plugin Ecosystem

r2mcp heavily improved, sandbox, extended tools and features

- r2copilot -> another MCP for r2 with focus on CTF

decai uses r2pipe2 to capture commands' stderr, support yolo

- Refactored providers/models logic

r2ai CI builds for all major platforms

- Rewritten in C, slowly improving but with a solid base

mai not directly tied to r2, but brings lots of joy for those who love mixing AI into commandline oneliners

Special Thanks

🎩

This conference wouldn't be possible without the help of all you: the users, the contributors and the speakers, but more precisely:

- **astralia** - for your patience and video editing skills
- **mikelloc** - finetuning audios
- **neuroflip** - filling the silence with your music

Click the Links And Run!

Check out the Schedule

- https://radare.org/con/2025

And tune in our Youtube Channel

- https://www.youtube.com/r2con

Let's dig deep into the roots of r2land!