



**Opening Talk 2019**



# **Welcome to R2Con2019**

**This is the 4th edition!**



**But first of all...**

**The wifi password!**

**Essid: Radare**

**Password: Radare@2019**

# R2Con2019 in Numbers

Thanks to everyone who made this possible

- Zero talks from me
- No conference dinner (only for speakers)
- Tickets ~40% more expensive
- No r2coins
- 5 speakers got rejected Visas
- Only 1 participant for the contributions competition
- Google rejected us to be in the GSoC
- Only one RSoC student survived
- 3 Rust-baked r2projects officially abandoned



# But let's be positive

- Same amount of people, same amount of beer, coffee and pizzas.

And many more contributions, talks submitted, bugs fixed and performance improvements

# No Srsly

- Thanks to everyone for coming, hope you all enjoy it, learn and share!

For those who didn't make it we will try our best to make r2con more borderless



# Competitions & Prizes

- Contributions
- PwnDistros
- CTF
- R2Wars
- Books
- Backpacks
- Notebooks
- Pads
- Bittboys
- Flags
- Beers
- Mugs
- T-Shirt



# RSoC

Thanks to NowSecure and Tencent for sponsoring this year.

Two developers applied... only one survived,

- Xvilka will give us some updates tomorrow
- Dodocodoso will be showing all the improvements he did

Sponsored by:

***Tencent***



NowSecure<sup>TM</sup>  
Advancing Mobile Security Worldwide





# Two tracks of trainings

## Introductory Trainings

- Survival training
- Development Internals
- Cutter

## Advanced Trainings

- R2Frida
- SMT

# Conference Talks Friday

## Morning:

- 09:00 Registration
- 09:30 **Keynote + r2wars**
- 10:00 Cutter
- 11:00 Protected iOS apps
- 12:00 **2h Lunch break**
- 13:00 **nomnom**
- 14:00 **2nd r2wars round**
- 14:30 Side channel attacks
- 15:00 Retdec

## Afternoon

- 16:00 Not only Street Fighter
- 17:00 **30min Break with r2wars**
- 17:30 R2 and Frida for mobile sec test
- 18:00 Down the business with r2dwarf
- 19:00 A journey thru ESIL
- 19:30 Teb/peb/dll blob for esil to parse
- 20:00 **Last r2wars run of the day**
- 20:30 EOD

# Conference Talks Saturday

## Morning:

- 09:30 **breakfast/registration**
- 10:00 **r2wars + show this help**
- 10:30 Object Diversification
- 11:00 Windows malware analysis
- 12:00 Me, u and everyone we debug
- 13:00 **r2wars 2nd round**
- 14:00 **lunch**

## Afternoon

- 15:00 ELF crafting
- 16:00 r2learn
- 16:30 **30min Break with r2wars**
- 17:00 ESIL applied for graph analysis
- 18:00 RSoC
- 19:00 **Closing + ctf,debian,r2wars prizes**
- 20:00 **beers/pizza**
- 23:00 **Chiptune party**

# Chiptune, Free Coffee & Vegan Pizzas!

On saturday night we will have the traditional pizza dinner and a chiptune party with the same musicians as last year.

Thanks!

- 4DBoy
- Neuroflip
- Cyanidansen

An extra applause for Neuroflip, who did the big screen video for this year too!



# r2wars

(First Demo Show and explanation)

# Development Retrospective since r2-3.0 -> 3.8

- Panels mode is finally usable. (Huge applause for vanell0pe!)
- Added support for mouse in panels and visual (not just wheel)
- The new table api opens a new world of possibilities
- Speed and quality improvements in analysis, binary parsing and interaction
- More consistent commands (help, autocompletions, suffixes...)
- Html / sh r2pipe and visual/panels tabs
- More jump tables and support trycatch block statements in dex
- Multidex/dyld support
- Support for PAC and capstone
- Better decompiler integrations
- Added chip8, riscv, added kernelcache..

# Future

## From r2land to r2mars...



④

# Let's Begin!