

Radare in Rust

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Hello!

My name is Ahmed Abd-El Mawgood

I am Computer engineering student

You can find me at:

- @_oddcoder on twitter
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Why rewriting radare?



Avoid segmentation Faults, with minimal overhead.



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Speeding things up.



Avoid segmentation Faults, with minimal overhead.

Speeding things up.

Having stable API.



What language to use?

brainf*ck sound like good candidate, no?





• C/C++.



Java.



- C/C++.
- Java.

• Go.



- C/C++.
- Java.

• Go.

Rust.

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Advantages of rust



Memory safety without garbage collection.



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Better support for multithreading (send trait).



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Easy to use package manager "Cargo".



- Memory safety without garbage collection.
- Better support for multithreading (send trait).

- Easy to use package manager "Cargo".
- Built in support for unit testing and API documentation.

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Disadvantages of Rust Challenges



Doesn't have as many libraries as C/C++.



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- Very verbose.



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The wrong design decision may not compile!



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- Very verbose.
- The wrong design decision may not compile!

Not Beginner-friendly.

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Current progress



The current code repo is here:https://github.com/oddcoder/rair



Demo

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Conclusion



Rust is great language to re-implement radare2 in; However, it requires careful design and studies steps.



Special thanks to all the people who helped me along the way, to name a few:

- Folks from rust community#rust-beginners on Mozilla IRC
- Sergi Alvarez and Anton Kochkov.



Any questions?