History of Rust

Say hi to Ferris!

Outline

Chapter 1
History at Firefox (Mozilla)

Browser Wars

After Netscape Navigator vs. IE, we had Firefox vs. Chrome

- Browsers are gigantic pieces of technology
- Practically replicating **OS features**
- Firefox's mission: make it fast

2006: The birth of Rust

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- 2009: Mozilla offically adopts Rust

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- **2020**: Pandemic strikes and Mozilla terminates entire Rust team
- Rust becomes independent — the **Rust Foundation** (2021)

Chapter 2
Systems Languages

Everything is built on C/C++

Decades of infrastructure, decades of memory bugs

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- Manual memory management — powerful, but error-prone
- Memory-safety issues common enough that **governments issue advisories** (NSA, CISA) recommending memory-safe languages

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One asterisk: `async`/`await` is not fully zero-cost

The internet's reaction

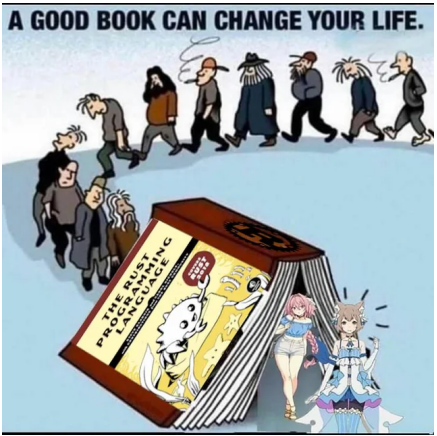
Chapter 3
The Rise of Rust

Community culture

Rust's growth is as much *cultural* as technical

- Explicit error message written for humans
- A strict **Code of Conduct** from early on
- Rustaceans, Ferris the crab, and yes — programming socks

A good book can change your life



“Rewrite it in Rust”

- Evangelism becomes a meme: **“rewrite it in Rust”** (aka. *crabbing*)
- Every popular tool eventually gets a Rust rewrite proposed
- Evangelism cuts both ways — enthusiasm vs. fatigue

Every. Single. Time.

PROGRAM

PROGRAM WRITTEN IN ©RUST™

Growing pains

- **Actix drama** (2020) — maintainer backlash over `unsafe` code criticism

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Growth exposes governance — not just code quality

Chapter 4
Alternatives: Zig

Zig: the challenger

- Started by **Andrew Kelley** (2016) as simpler alternative to C
- No hidden control flow, no hidden allocations
- `comptime` instead of macros — explicit over implicit

Meanwhile, poor Ada

Bun & the AI rewrite

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- **Bun** — a JS runtime written in Zig, meteoric rise since 2022
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- Then: Anthropic acquirement and an AI-driven rewrite — evangelism meets automation

The pinnacle of Rust evangelism

Even **alternative** innitiatives get converted back to Rust

Rust won the systems-language conversation — every challenger is now measured against it

Thank You

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