Rust Limericks

Andre 'lloqig' Bogus

Rust-land is a very strange place sans null deref nor data race

it has its own styles but once it compiles it will not blow up in your face In Rust-land, much unlike in C borrowck looks out for me.
It checks all my borrows
'gainst aliasing sorrows
and lets me code concurrently.

The Rust borrow checker will prove that no mutable reference coexists with another reference, thus ensuring memory safety Rustaceans are very polite
read the Code of Conduct each night
We value the lot
including each bot
and don't shout 'WHO SENT ME THIS
SHITE?'

The Rust Community
follows the Code of
Conduct, which
The Rustessentially typoils down
is known to do reslige of ecency
and befriend bots
Linus Torvalds, Kernel
head honcho, lashes
out against one of his
lieutenants

Or do it in C if you must,

But do it correct

Egad! get it working or bust.

For fast stuff, please code in in Rust

Or your data is wrecked.

In Rust-land we're for code reuse

We take a stand against abuse We're having good fun

While getting stuff done

Come join us now if you so choose

Sometimes your Rust code looks weird Because many sigils appeared

Yet the reason behind

is not hard to find

So really it is to be cheered

it's a language I don't want to teach

mental images of walks on the beach

As gladly for Rust I will reach

far too complex-no joke

and it doesn't evoke

With Rust you're getting Results unlike any lang-based cults
Where the right way to code lets yer neurons erode adding to injury the insults

You want to consider a Cow

Need to save memory and don't know how?

so instead of a clone

you can borrow or own

So use it all in your code now!

I'm coding in Java by day
sometimes it gets in my way
where in Rust I abstract
I need to counteract
runaway patterns joining the fray

Java is known to be quite pattern-happy, sometimes leading to overengineered code Some new rustic RFCs landed
The process is quite heavy-handed
Someone's coding the code
and have crater explode
then the RFC gets amended

A tool to check language changes against all known crates on crates.io Aaron Turon gave his rapport
In matters of urgent import.
He's asking someone
Let his project go on,
I.e. he seeks crossbeam support.

On Rust's internal forum, a request for help with the crossbeam project (with apologies to Pokémon fans)

As many a Rust newbie feared

a wild borrowck appeared.

It's super effective

A reference detective

so your code becomes well-engineered.

Let x be a mutable slice
of T where T has a size
then we can mem::replace(..)
it in various ways
I think that is awesomely nice.

A method to replace the contents of an item in memory, returning the original value any day our crater sans boom the system be healthy and useful-code-wealthy

Rust crates bloom

despite trolls spelling impending doom

Let a

Who knows what Rust in six weeks give us new features and tweaks will it blend? will it slice? and be awesome and nice?

Now I sound like a total geek.

Rust releases a new stable and beta version every six weeks Burntsushi when asked to rewrite ripgrep in C++ said he might but he'd like to refrain from the need to maintain it as that'd be hell of a fight

Andrew Gallant

The maintainer of the benchmarksgame site asks if ripgrep could have been written in C++ With Box you put stuff on the heap it is surprisingly cheap and unlike on stack things stay if you go back from a function (or otherwise leap)

@Manishearth petitioned to rid
our community of people who did
enjoy pineapple pie I don't quite know why
but I don't like exclusion one bit

As Rust has implicit <u>Drop</u>
Your data will silently plop
out of memory as one
unless you're holding on
to it until your program will stop

A trait to dispose of values

Result is a return type tailored to functions that either do fail or return on success to the calling process viz. Rust is quite candid on failure

The Rust team took the <u>initiative</u>
by discussing with rustic natives
their wants and their needs
if you would ask me: Please
make next Rust concatenative

The Rust ergonomics Initiative

The red monks just went ballistic over their semestral statistic As TypeScript and Rust Gained lots of trust that is anyway probabilistic

Use <u>error-chain</u> to handle faults

<u>rand</u> for randoms & <u>quickcheck</u> for naught

<u>rayon</u> - all cores go

<u>tokio</u> - async IO

Those crates are pragmatic defaults

Jake & Carol are <u>asking around</u>
someone up for a sponsoring round
to write a cargo clone
that runs inhouse, alone
so enterprise use may abound

Integer32 LLC: A Rust consultancy company

<u>@SimonSapin asked</u> for detail on what Systems Programming entail so Rust is there but Go is no fair yet I think the distinction is frail

(Full disclosure: I misinterpreted Simon's intention)

StackOverflow asked once more to learn what tech we love and what we spurn VB6 still a flop,
Rust came out on top this year for yet another turn

The annual StackOverflow developer survey Rustaceans will usually track
their heap usage forwards and back

so no allocation lead to altercation

One could say that we code full-stack

```
for i in [1, 2].iter().map(
|x| x + 1).filter(|zap|
zap % 2 == 0) {
```

} // ok, now I'm taking a nap

println!("You are my hero");

Our [clippy] will warn us on code that may at some day corrode through our source and about for patterns that do not well bode

it'll gladly look out

Rust coding is one of the best
if you want to easily test
your code when given stuff
performs correct enough
cargo fuzz'll take care of the rest

A fuzz testing tool for Rust code When <u>C++ devs discussed Rust</u>
some of them concluded we must
reign in some people
who shout "wake up, sheeple"
(and I think their request is just)

Some people will evermore be fascinated by K&R's C though it will crash and burn they do hope once to learn to work with malloc and free

Brian Kernighan & Dennis Ritchie, creators of the C programming language

C functions for errorprone manual memory management If in Rust code you need to store one item of some type or more, you say: "What the heck!

Let's simply use <u>Vec!</u>"

(the name is omitting a "tor")

With Google now running the show
The zeitgeisty language is Go
However one just
can program in Rust
and tell Thompson & Pike it ain't so.

Two of Go's creators

Rust does have some likeable traits works well with mutable states we can safely abstract what in C can be cracked so the risk of pwnage abates

Traits in Rust allow to
describe behavior
Because Rust
while abstracting the
disallows mutation
data
only in concurrent
settings, it works very
well with it, unlike
some functional
languages

Any closure will - if it can implement a trait we call <u>Fn</u> also be <u>FnMut</u> (and that's double plus good) and perhaps <u>FnOnce</u> once again

Rust's Default trait gets more hype the more you use it for a type for you may wanna strive to use auto-#[derive]
Result: You have less code to type

A trait to abstract the notion of a default value. Can be autoderived for structs/enums if all components in turn implement it

Rust's match clause has sufficient might to destructure values alright

Its arms may be guarded

its patterns regarded conceptually really tight

"Rust will fail 'cause of its style, borrowck and time to compile, (now that's what trolls mostly revile)

all that complexity

is not even in C!"

You want Rust to parse - you may choose nom, combine, chomp, <u>LALRPOP</u>, peruse, pom, peel or another there are many other

Now you still don't know which one to use

(This led to the follow-up below)

Martin Hellspong <u>demands I review</u>
each Rust parsing lib old&new
in limerick form
(my usual norm)
but it's too much work in my view.

```
let sum=args().into_iter().fold(
0,|old,p|p.parse::<u64>().unwrap()+old);
println!("{} × BADA-BUM",
0u64 + sum);
```

//this 1's limerick gold

If you implement <u>From<T></u> for U

Rust will freely deliver <u>Into</u>

so use From if it fits

(if th'orphan rule permits)

and the rest the compiler will do

When in Rust code you use a for it'll loop and each time ask for more if it does get a <u>None</u> iteration is done otherwise there's <u>Some (value)</u> in store

In May Rust is two years old
The changes have been pretty bold
Every six weeks it grew
out the old, in the new
The stability promise'll hold

May 2017 marks the two-year anniversary of Rust's first stable release SHAR a game built in Rust

Got <u>greenlit on Steam</u> so we just

Send congratulations

amidst great celebrations

Soon we'll sate our rust gamedev lust

If someone alleges you must rewrite your project in #rustlang will do what it needs to undo the PR gaffe&mop up the dust.

[@rustevangelism]

Our Rust has a problem to be quite simple to interface C because it is believed C strings are ill-conceived (besides malloc isn't free

C strings have been shown to be underspecified With Rust more folks get access to systems programming with less fearful footguns and stuff

fearful footguns and stuff (C++ has enough)

Here's to its ongoing success!

rustdoc won't hoedown no more
the markdown it had used before
instead pulldown-cmark
builds gay as a lark
too beautiful docs to ignore

The formerly used markdown parser

A CommonMark parser written in Rust

rustc does more things <u>on demand</u>
and caches things unless it can't
to faster compile
(or error in style)
the Rust code it just has on hand.

It is now a common refrain to ask Rustaceans to abstain from being a bother and not ask another C++ dev Rust coding to train.

VSCode now gets its search power

by ringrep & won't need 1 hour

- 2 search through your code
- 4 that thingy you wrote

alone in your ivory tower

Rustaceans collectively swoon at a young fictitious girl who soon her threads go pop like a balloon

may be the next Steve

a few are peeved

[rayon]'s getting faster & better

Reuses a pool

It follows iters to the letter

for threads, that's so cool!

and it splits and it slices, et cetera.

<u>Sōzu</u> is a proxy, reverse

With stated goals quite diverse

It shouldn't be brash

Nor panic or crash

Rust willing, it'll proxy this verse.

Rust language can now be compiled
For the web, with <u>rustfmt</u> styled,
and with <u>clippy</u> be checked
So it's nice and correct
Let @rustevangelism go wild!

A 2017 April Fool's joke: The Rust Evangelism Strike Force (R.E.S.F.) A zero-cost cornucopia

For we may freely loan

Rust land is a commie utopia

things that others must own It's like ownership's causing myopia join a project and find you a mentor

If into Rust you want to enter

become a great Rust implementer

who'll help you for free

so you can easily

The orange site jointly discussed a programming language called Rust 'Tis but too <u>weird</u>' some people feared being trollishly non-C++ed.

Hacker News

programming in Rust is good fun
however your code will not run
unless you have shown
that you correctly own
your data 'cause that's how it's done

(At the <u>request</u> of Carol Nichols:)

The core team was <u>reinforced twice</u>

With Carol and Nick! Congrats! Nice!

Now here's in due time

your humble rhyme

That's my way of breaking the ice

Rust code doesn't need a GC
there's no delete needed, nor free
yet people complain
again and again
'bout lifetimes, how hard they'd be

Garbage Collector

Your code will work, but not snappy But in Rust it will roar

If in <u>python</u> you're coding happy

Leave you asking for more

And that borrowck is a nice chappy

With [error-chain] you can lay back assume that your code is on track to handle all faults

[unwrap()] is a lazy-ass hack

with nice sane defaults

[allwrap()] wa alag assituate

[unwrap()]: # **TODO**: Result.unwrap()

I don't know if this thing is fake
But if not, something I would take
To write Rust code
In retro-mode
(I'll still use cargo, not make)

A (probably fake) screenshot of a Turbo-Pascal like Rust IDE Rust Maps do have Entries in store don't need double takes anymore
They're vacant or not anyway pretty hot if u know what to employ'em for

The entry(_) method of maps returns a type that represents the empty or filled entry for a given key Rust's core infrastructure indeed had for helping hands urgent need So a team they set up to take care of the op and on IRC they will meet.

Rust-Internals:
Announcing the inofficial Rust
Infrastructure Team

Austin Hicks <u>did a stellar job</u>
reducing Rust memory slop
by teaching rustc
to reorder fields free
(Unless #[repr(C)] tells it to stop)

Rust will gladly help you on error

Amidst systems programming terror

to follow right now or whene'er

the messages nice

with useful advice

Unlike functional langs Rust made a decision for mutable state you can't mutate a rhyme lest your program befall a bad fate

but twice at a time

You <u>can now rustup</u> RLS thus reducing CPU stress
Those will now keep chilled no more needing to build the whole kitchen sink, just decompress

Rust Language Server

To Kyiw I'm taking a flight thanks <u>laim</u> for the ride at <u>RustFest</u> to meet the Rust hacker elite (and inbetween party all night

As Rust gains copious traction
expect a befuddled reaction
by luddites who see
only their beloved C
and shun mem'ry safety's attraction

A friend of mine tried 2 use docker it's error messages would mock'er for me that's a literal blocker

Such tasteless reports

and useless aborts

#rustlang serde is stable! I feel
this upgrade has mainstream appeal
0-copy read things

0-copy read things but escaped JSON strings

And at zero \$ it's a steal

Once Rust is widely adopted

& C's userbase is coopted

We can lastly retire

R.E.S.F. & admire

the end of unsafety-we chopped it.

Rust Evangelism

Strike Force

Java wants to copy Rust's match but as usual there's a small catch:
It needs you to type
the expression w/ type
and not be as powerful, natch

A blog post by Brian Goetz outlining their preliminary plans for match in Java <u>Debian asked</u> /r/rust redditors become cargo deb package editors and help package Rust (as sure someone must) a Firefox requirement sequitur cargo is a marvelous tool can be used by about any fool so you can just depend on all crates in the end

Eyour code will be built! Very cool

I'm stoked to see some friendly faces in Kyw of all the world's places, with a ticket I'm blessed to 2017's [RustFest]
Let's get there without data races

Rust is known to prevent data races

TimNN went the [arduous track]
to up Rust's [LLVM] stack
he's the hero we need
for he did succeed
where most would defeated go back

arduous track
11VM

Redox' ion shell is pretty speedy also far from memory-greedy.

But the biggest gain:

It's syntax is sane without nonsense like, say, 'esac' or 'fi'

and every day is getting more

So Indy's secret lair

crates.io has 9K crates in store

Looks relatively bare

Yet no crate to melt Nazis here-Or?

Some Rust code newbies and I Got in Kyw together to try to learn Rust, as shown by Ashley, who'll own the title 'knows Rust how&why'

> Ashley Williams, who held the Kyiv RustBridge workshop

The talks were the absolute best!

In Kyw there was a RustFest

As is my bag

full of Rust swag

So now I'll fly home for some rest.

RustFest was great fun overall
Many great folks I met in the hall
So here's what I do
and hope you'll, too
I'll see you <u>in Zurich this fall!</u>