Experimenting with LLM Applications in R

Nic Crane

I LLMs?

Project 1

Social Media Post Generator

R
Ladies

We're Relaunching the R-

rladies.org/news/2025/abstract-review-relaunch/

HOME ABOUT DIRECTORY ACTIVITIES BLOG

January 16, 2025

WE'RE RELAUNCHING THE R-LADIES ABSTRACT REVIEW SYSTEM!

We know how challenging it can be to take that first step into public speaking and submit an abstract for a conference.

That's why we're thrilled to announce the **relaunch of the R-Ladies Abstract Review System**! 🎉

Our system connects aspiring speakers with reviewers who provide feedback and guidance, helping them refine their abstracts and scholarship applications.

Social Media Post Generator

GitHub Markdown Link

https://github.com/thisisnic/blog/blob/

Select Platforms

- [x] LinkedIn
- [x] Bluesky
- [x] Mastodon

Select Tone

Informative

Posts to Generate (per platform)

3

- [x] Use Emojis?

Hashtags to Include

#rstats

Generate Posts

Generated Posts

Okay, here are three social media posts tailored for each platform - LinkedIn, Bluesky, and Mastodon - to promote your blog post about generating social media content with {shiny} and {ellmer}. I've used an informative tone with relevant emojis and hashtags.

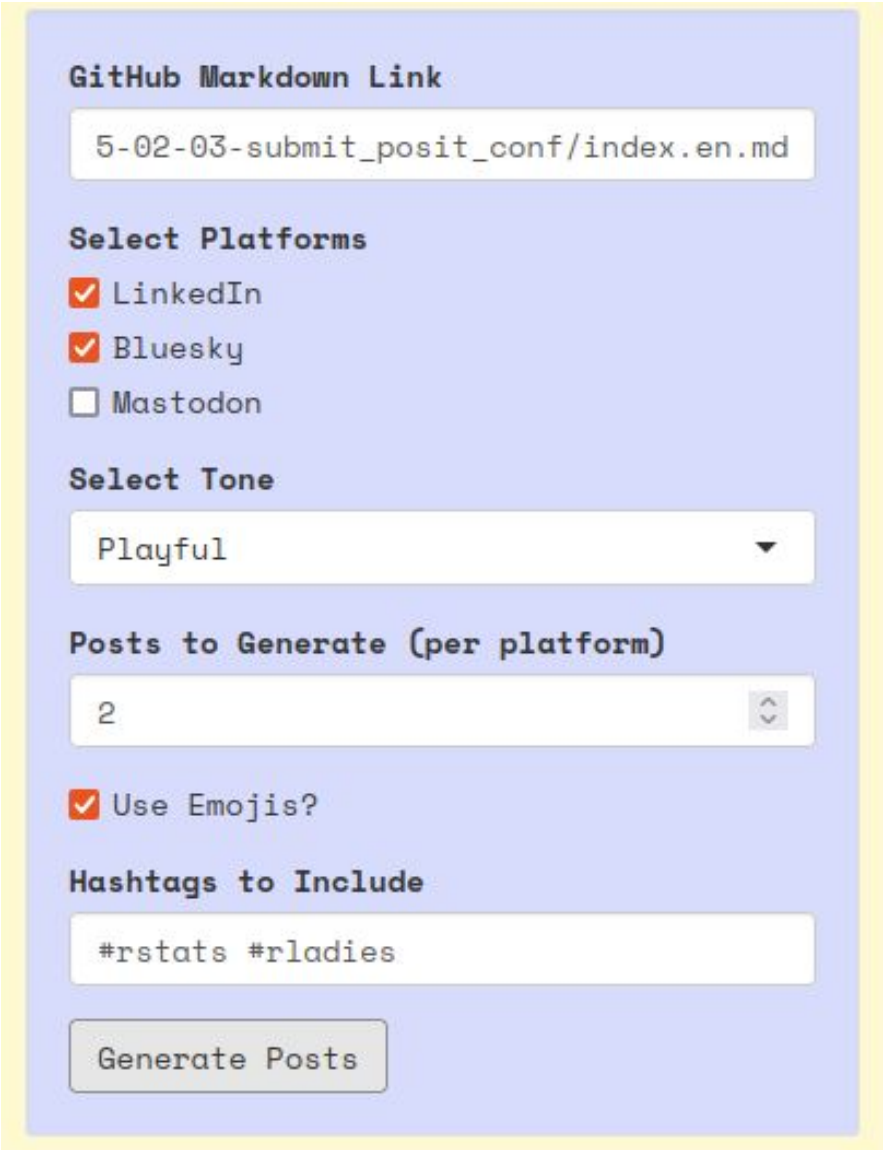
LinkedIn

1. **Headline:** Streamlining Social Media Promotion with R and AI 🚀

   Body: As a data scientist, I'm always looking for ways to automate repetitive tasks. In my latest blog post, I share how I built a Shiny app using the `ellmer` package to leverage Google's Gemini API for generating social media posts from a blog post. This project shows how the power of LLMs can be harnessed within R to boost productivity. Check out the app, give it a go and let me know your thoughts! Link to the blog post in the comments. #rstats #AI #Shiny #Rlang #DataScience #Automation #Ellmer
2. **Headline:** Blog Post Promotion Made Easy with {shiny} and LLMs 🤖

   Body: Tired of spending hours crafting social media posts for your blog content? I was too! That's why I built a Shiny app that uses the `ellmer` package and Google's Gemini API to automatically generate engaging social media content. The app allows you to customise the output, and get platform-appropriate posts. In this post, I walk you through the process and share the code. Read the full article here: [Link to Blog Post] #rstats #AI #Shiny #Rlang #DataScience #SocialMediaMarketing
3. **Headline:** From Blog Post to Social Media: Automating Content Promotion with R 💻

   Body: Promoting your blog posts can be time-consuming. I recently developed a Shiny app using the `ellmer` package to automate this process by leveraging the power of Google's Gemini API. The app takes your blog post's markdown file as input and generates tailored social media posts. I'm planning on adding support for OpenAI and Anthropic in the future. Want to learn more? Check out the full blog post and the GitHub repo. [Link to Blog Post] #rstats #AI #Shiny #Rlang #DataScience #ContentMarketing #Automation


GitHub Markdown Link
5-02-03-submit_posit_conf/index.en.md
Select Platforms
LinkedIn
Bluesky
Mastodon
Select Tone
Playful
Posts to Generate (per platform)
2
Use Emojis?
Hashtags to Include
#rstats #rladies
Generate Posts

https://github.com/thisisnic/socialmediagen

Generated Posts

Okay, here are two playful social media posts for each platform (LinkedIn and Bluesky) to promote the blog post, incorporating emojis and relevant hashtags:

LinkedIn Posts

Post 1:

📢 Calling all #rstats & #rladies enthusiasts! Nervous about submitting a video abstract for Posit Conf 2025? Don't sweat it! 😅 Our latest blog post is packed with tips and tricks from past speakers to help you nail that one-minute pitch. From tech recommendations to structure advice, we've got you covered. Plus, we're offering feedback! Check it out and get ready to shine! ✨ [Link to Blog Post] #PositConf #DataScience #Speaking

Post 2:

Thinking of leveling up your career by speaking at Posit Conf 2025? 🚀 Your video abstract is your first impression! Want to make it count? 🤔 We've compiled the best advice from experienced speakers (including the secret to Nic Crane's infectious enthusiasm 😉) in our new blog post! Get the inside scoop and submit your best abstract yet! 👉 [Link to Blog Post] #rstats #DataVisualization #PublicSpeaking #PositConf

Bluesky Posts

Post 1:

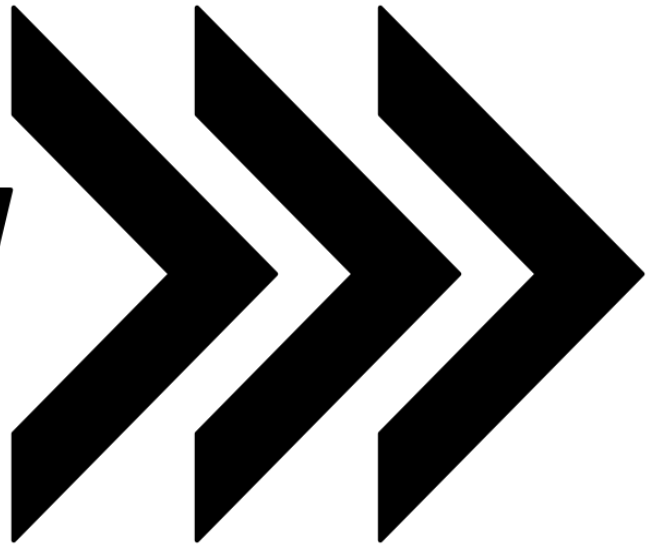
Posit Conf 2025 talk submissions are open! 🤯 But the video abstract... *shudders*. Fear not, fellow data wranglers! We've got a blog post with tips from past speakers to make it less scary. Think of it as your 60-second shot at data stardom! 🌟 [Link to Blog Post] #rstats #PositConf #DataScience #VideoTips (Also, pro tip: a little enthusiasm goes a LONG way! 🤪)

Project 2

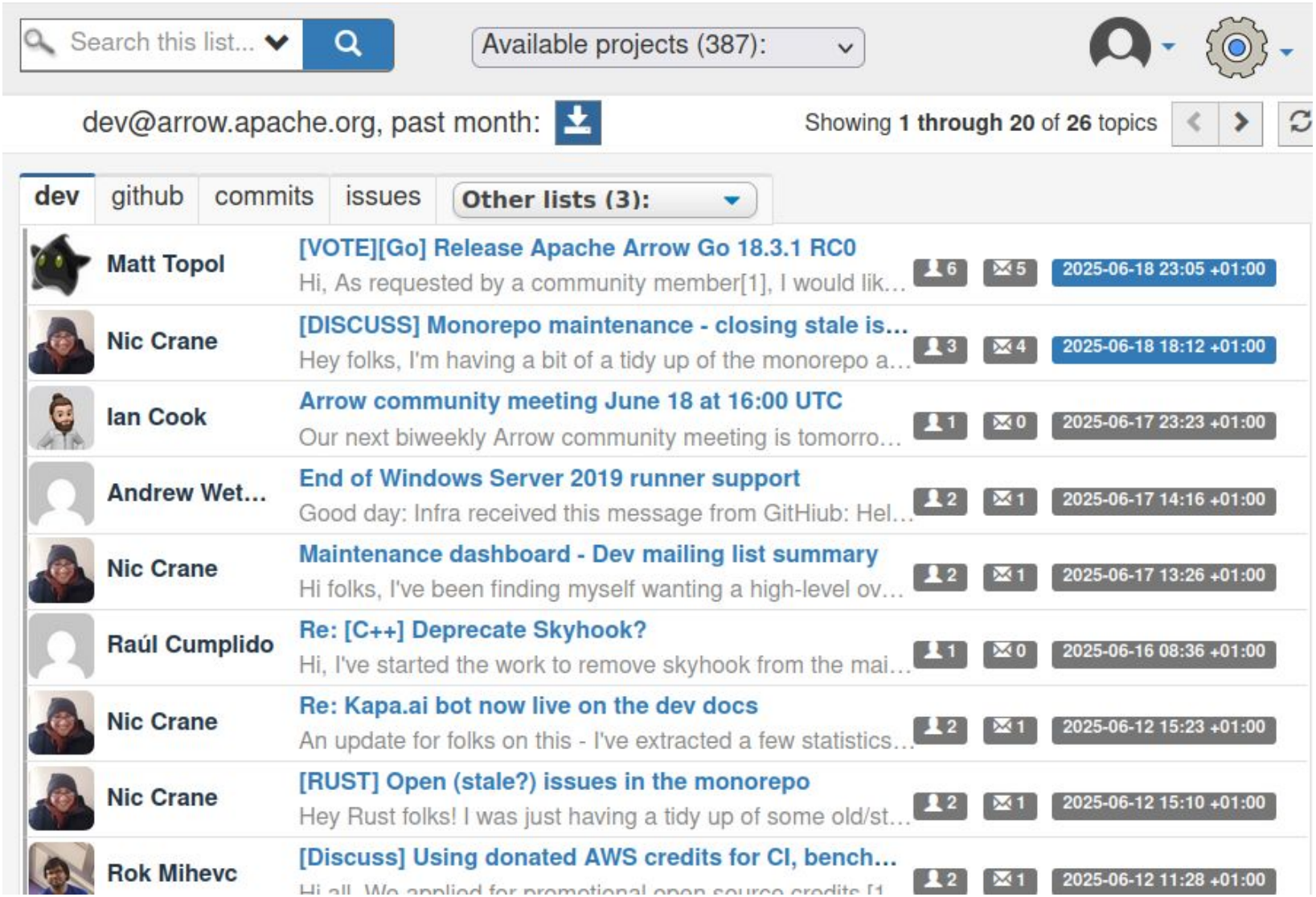
Arrow Mailing List Summariser

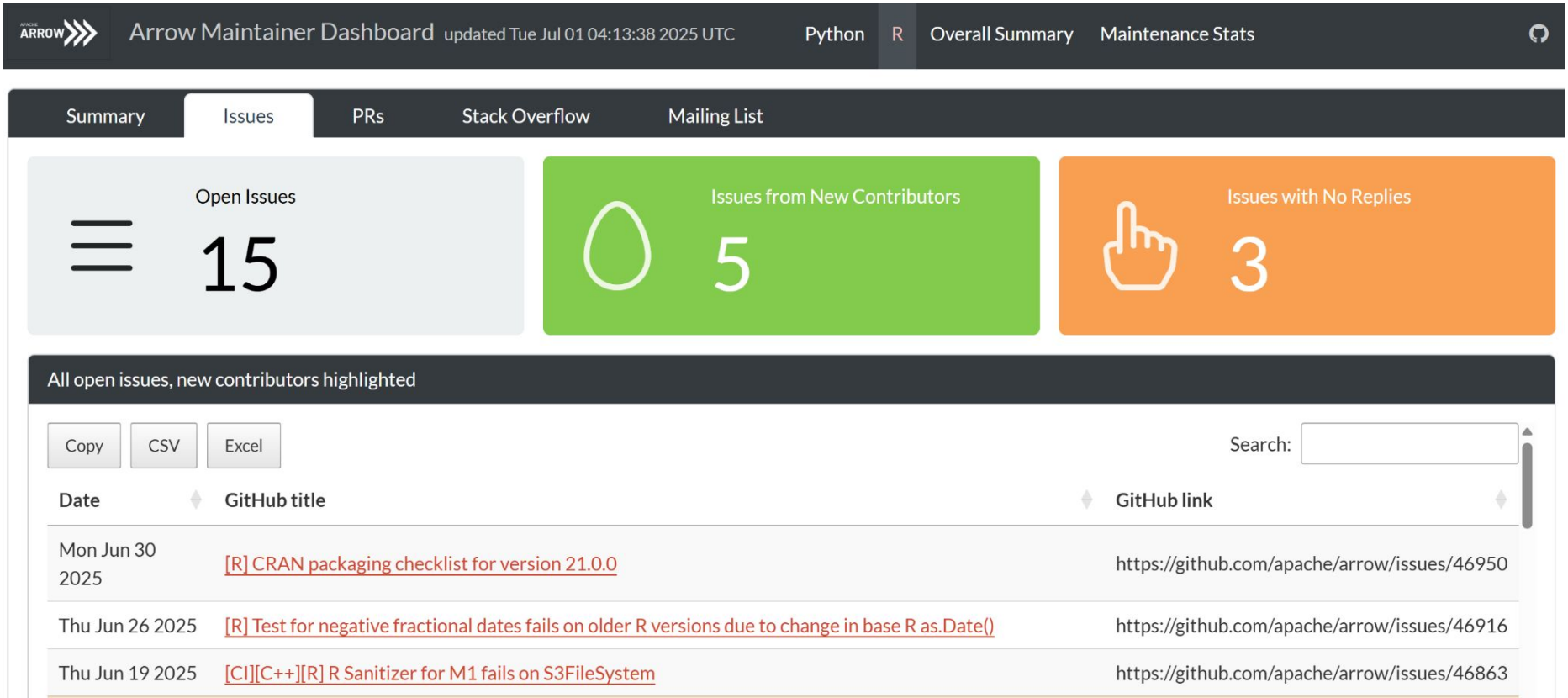
APACHE

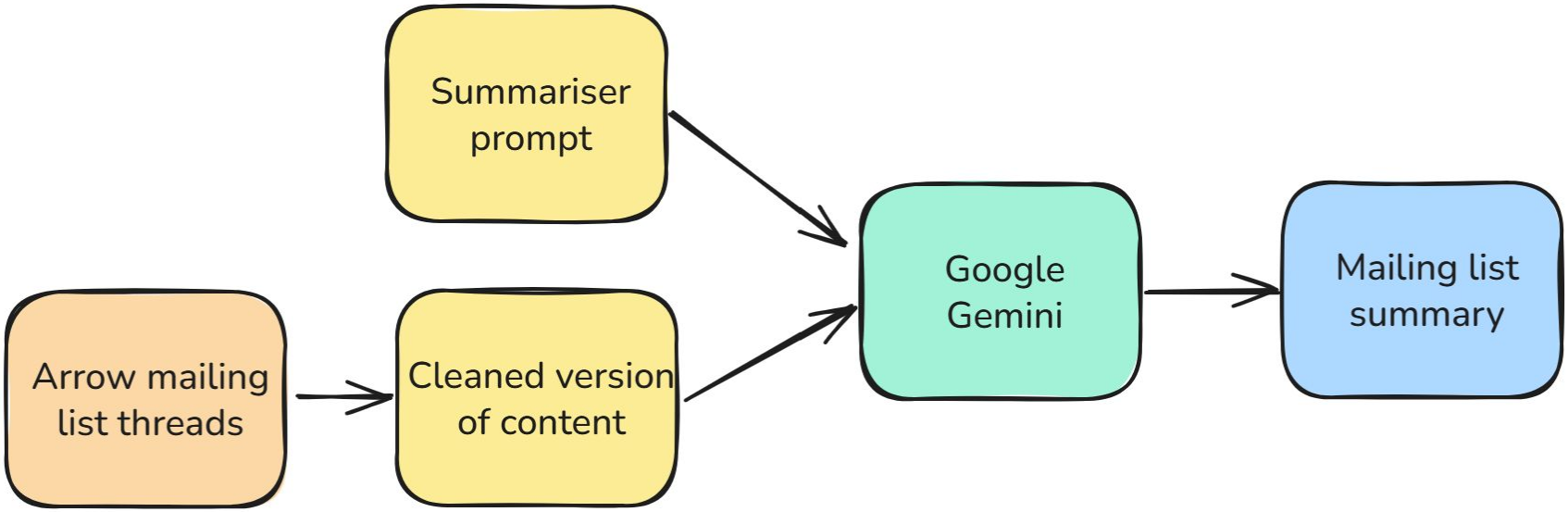
ARROW



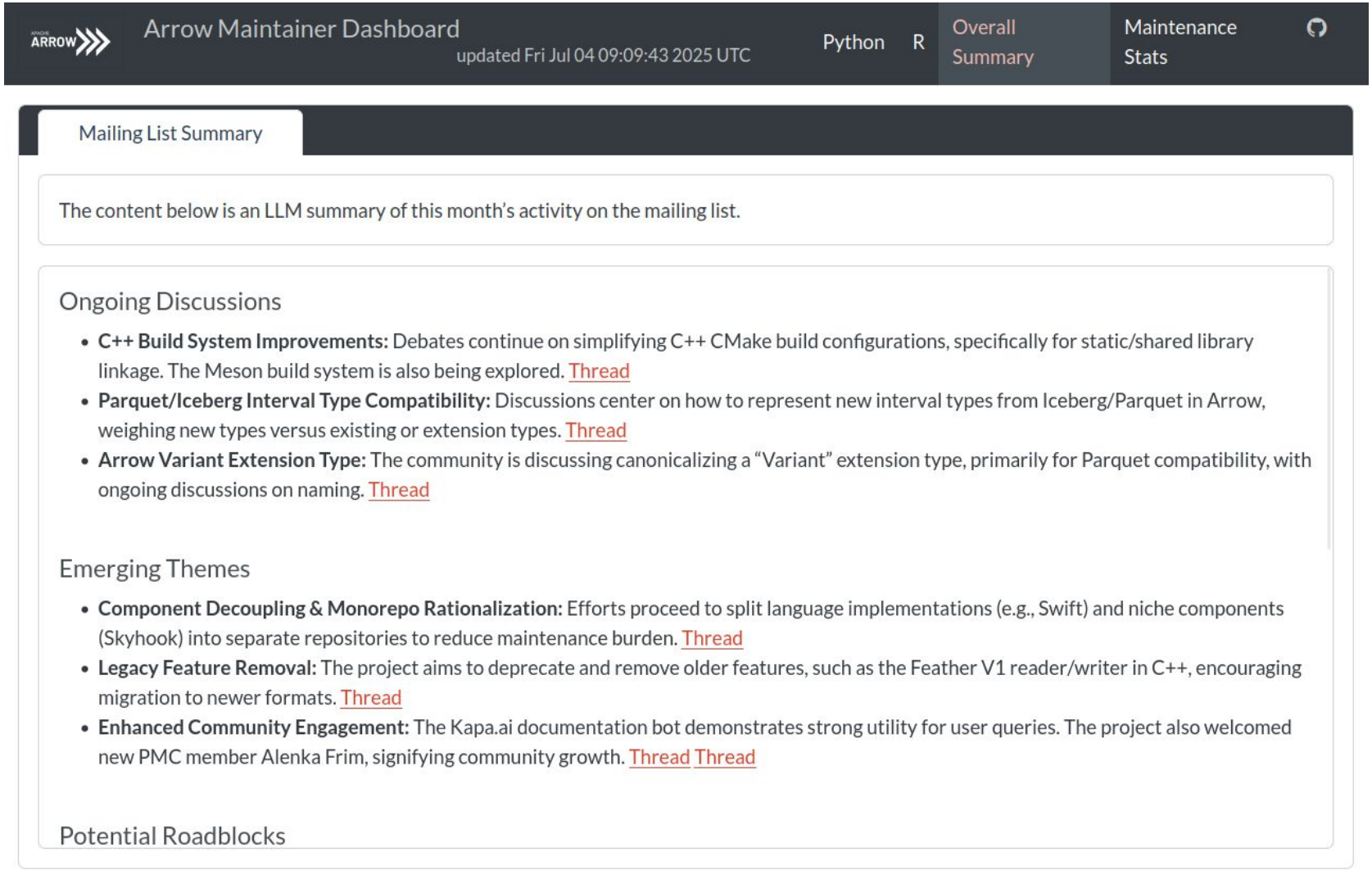
https://lists.apache.org/list.html?dev@arrow.apache.org




Arrow Maintainer Dashboard updated Tue Jul 01 04:13:38 2025 UTC
Python
R
Overall Summary
Maintenance Stats
Summary
Issues
PRs
Stack Overflow
Mailing List
Open Issues
15
Issues from New Contributors
5
Issues with No Replies
3
All open issues, new contributors highlighted
Copy
CSV
Excel
Search:
Date
GitHub title
GitHub link
Mon Jun 30 2025
[R] CRAN packaging checklist for version 21.0.0
https://github.com/apache/arrow/issues/46950
Thu Jun 26 2025
[R] Test for negative fractional dates fails on older R versions due to change in base R as.Date()
https://github.com/apache/arrow/issues/46916
Thu Jun 19 2025
[CI][C++][R] R Sanitizer for M1 fails on S3FileSystem
https://github.com/apache/arrow/issues/46863


Summariser prompt
Arrow mailing list threads
Cleaned version of content
Google Gemini
Mailing list summary

https://tinyurl.com/arrowdash



Project 3

Using Copilot

+

?

[R] Sub-day precision Date class must be converted to integers floor, not trunc #44502

Closed

eitsupi opened on Oct 22, 2024 Contributor

Describe the bug, including details regarding any error messages, version, and platform.

Same as apache/arrow-nanoarrow#665

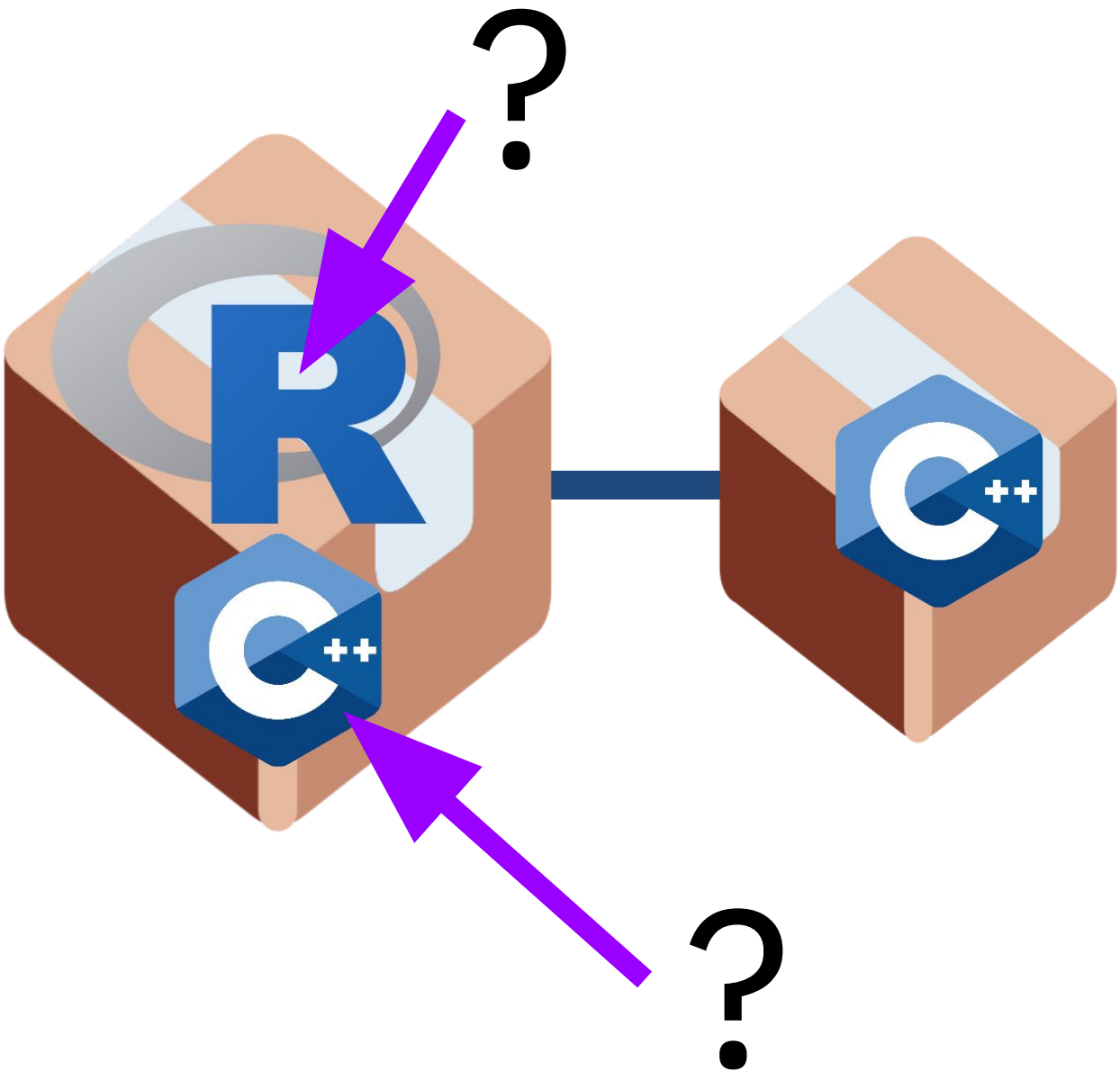
```
d <- as.Date(-0.1)
d
#> [1] "1969-12-31"
as.vector(arrow::as_arrow_array(d))
#> [1] "1970-01-01"
```

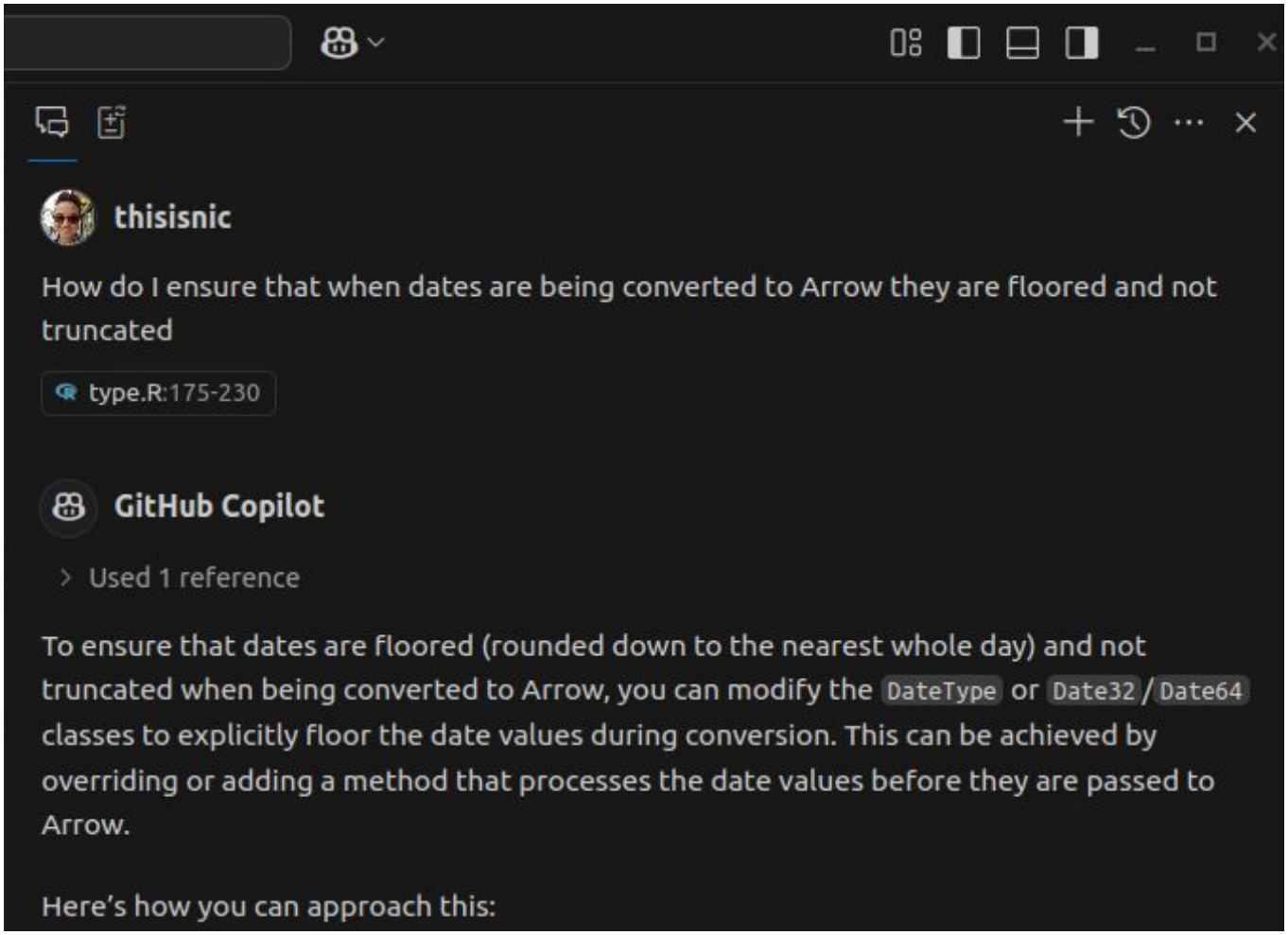
Created on 2024-10-22 with reprex v2.1.1

Component(s)

R

Create sub-issue

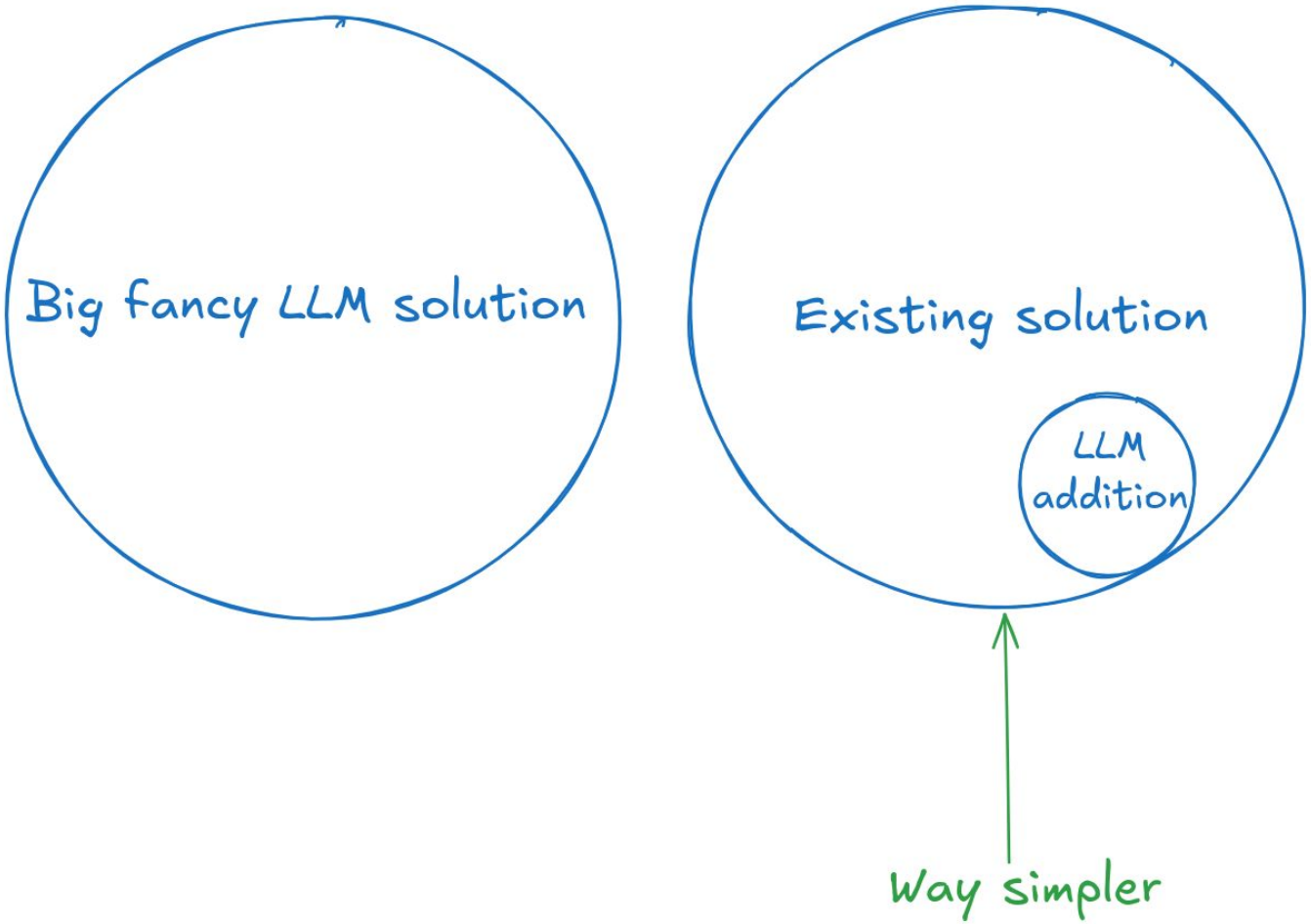

?
R
C++
C++
?


thisisnic
How do I ensure that when dates are being converted to Arrow they are floored and not truncated
type.R:175-230
GitHub Copilot
Used 1 reference
To ensure that dates are floored (rounded down to the nearest whole day) and not truncated when being converted to Arrow, you can modify the DateType or Date32/Date64 classes to explicitly floor the date values during conversion. This can be achieved by overriding or adding a method that processes the date values before they are passed to Arrow.
Here's how you can approach this:

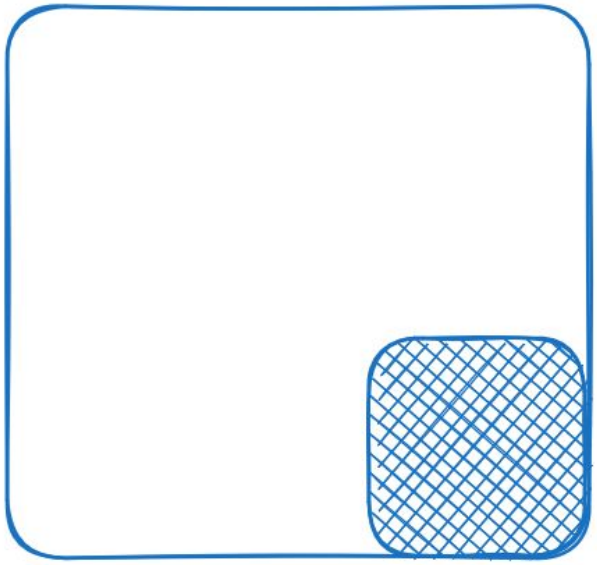
6
r/src/r_to_arrow.cpp
@@ -595,11 +595,13 @@ class RPrimitiveConverter<T, enable_if_t<is_date_type<T>::value>>
595 595 return VisitVector(it, size, append_null, append_value);
596 596 }
597 597
598 - static int FromRDate(const Date32Type*, double from) { return static_cast<int>(from); }
598 + static int FromRDate(const Date32Type*, double from) {
599 + return static_cast<int>(std::floor(from));
600 + }
599 601
600 602 static int64_t FromRDate(const Date64Type*, double from) {
601 603 constexpr int64_t kMilliSecondsPerDay = 86400000;
602 - return static_cast<int64_t>(from * kMilliSecondsPerDay);
604 + return static_cast<int64_t>(std::floor(from * kMilliSecondsPerDay));
603 605 }
604 606
605 607 static int FromPosixct(const Date32Type*, double from) {

I LLMs?

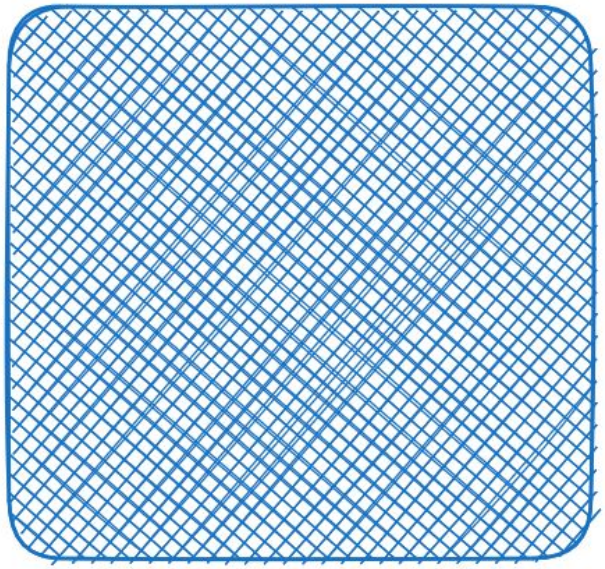
Deployment Options



Prompt Engineering

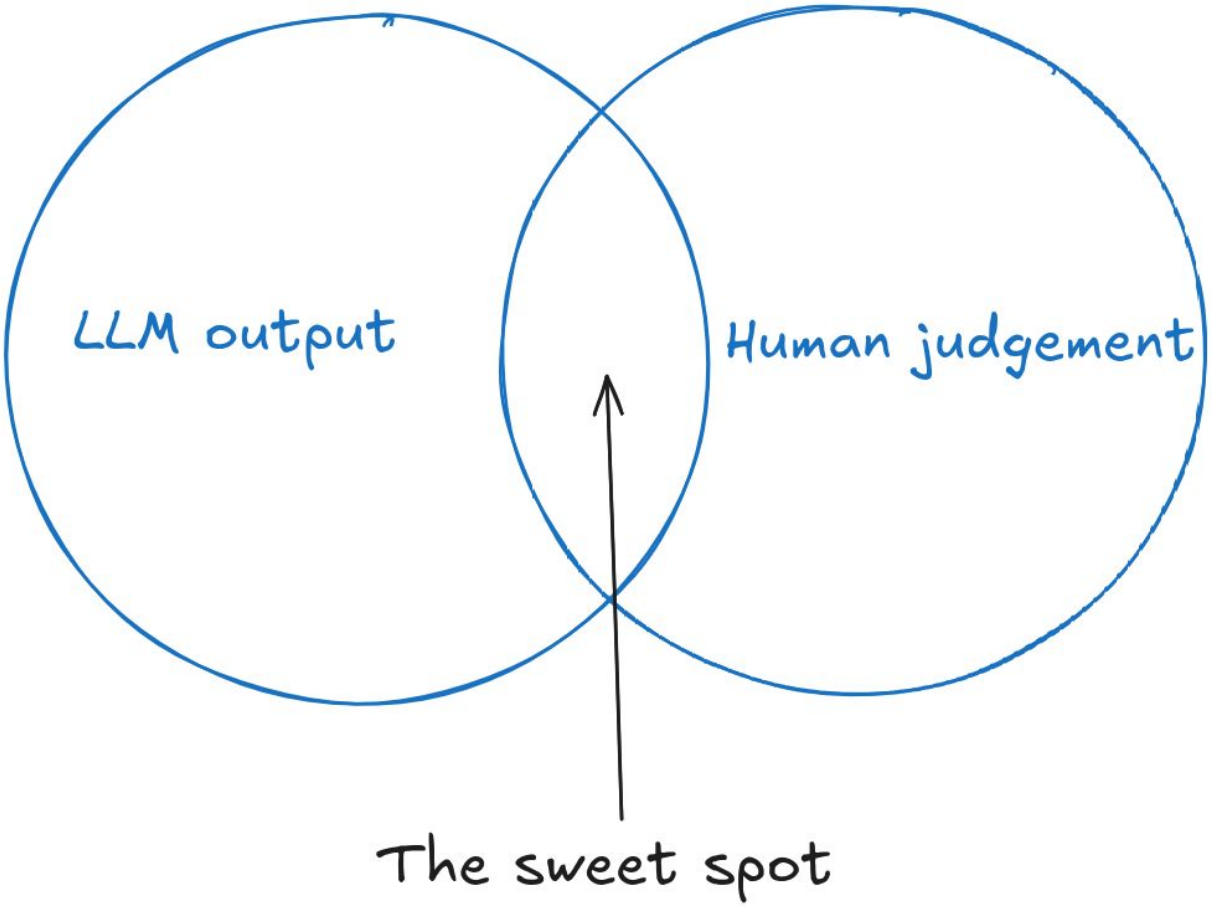


Simple prompts OK



Good prompts matter

Solving Coding/Knowledge Problems



https://www.linkedin.com/in/niccrane/

https://bsky.app/profile/niccrane.bsky.social