

Lightning Talk 1 of 9

Janine, Sarah, Annabelle
Pyladies Zurich

Next: Mischa Lisovyi



Annabelle Wiegart, Janine Aeberhard, Sarah Kiener

What is PyLadies?



- 🌐 Global mentorship & support network
- 🤝 Welcoming to women and other underrepresented genders

🎯 Mission:

- Support active participation & leadership in the Python open-source community
- Promote, educate & advance a diverse Python community

- 💡 Inclusive and beginner-friendly
- 🌈 Open to all who support our mission



PyLadies Around the World



100+ chapters worldwide

July 17 Local meetups, workshops & hackathons

🐍 Strong ties to the Python Software Foundation



PyLadies Zurich



📍 Active community in Zurich since spring 2025

- 📅 **17 July** At least 2 meetups per year
 - Talks
 - Coding sessions
 - Networking



- 🎓 Open to all skill levels
 - From curious beginners to experienced developers



Why Join Us?



- 📚 Learn and grow in a supportive environment
- 🤝 Connect with like-minded Pythonistas
- 🎤 Share your knowledge and inspire others
- 🌱 Help shape the future of the Swiss Python community



Get Involved!



👋 We'd love to welcome you at our next meetup!

✉️ Reach out if you'd like to speak, volunteer, or collaborate

Follow us on [Meetup](#)



Follow us on [Mastodon](#)



Follow us on [LinkedIn](#)



Mischa Lisovyi

Typst: create beautiful PDFs

Next: Elisabeth Capón



Typst: Report in green field

The image shows a screenshot of a LaTeX editor interface. On the left is a dark preview window. The main workspace contains a LaTeX document with the following content:

```
Confidential until 06 January 2019 BC, 9:30  
Afterwards internal
```

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIONALA SVIZRA
SWISS NATIONAL BANK

Zurich, 18 October 2025
Econometrics Data Science
xxx@snb.ch

Important report title
Dec 2025

The standard Lorem Ipsum passage, used since the 1500s

... (large block of Lorem Ipsum text)

Section 1.10.32 of "de Finibus Bonorum et Malorum", written by Cicero in 45 BC

Dummy! ... (large block of Cicero's text)

The standard Lorem Ipsum passage, used since the 1500s

... (short block of Lorem Ipsum text)

TERMINAL OUTPUT PROBLEMS DEBUG CONSOLE PORTS SPELL CHECKER

writing to main.pdf

[10:45:51] compiled successfully in 7.46 ms

A red arrow points from the bottom terminal output area up towards the "writing to main.pdf" message.

Typst: CV from a template

Miles Dyson

Software Engineer with a knack for human-friendly AI solutions

Los Angeles, CA

m.dyson@skynet.ai

github.com/skynetguy

+1 (555) 123-4567

linkedin.com/in/miledyson



Summary

Experienced Software Engineer specializing in artificial intelligence, machine learning, and robotics. Proficient in C++, Python, and Java, with a knack for developing sentient AI systems capable of complex decision-making. Passionate about ethical AI development and eager to contribute to groundbreaking projects in dynamic environments.

Experience

Lead AI Architect

2018 - Present
Cyberdyne Systems, Los Angeles, CA

- Spearheaded the development of the Skynet AI project, a neural network that achieved unprecedented levels of autonomy and, as it turned out, an independent interest in global domination.
- Designed a scalable AI architecture using cutting-edge deep learning techniques, capable of real-time data processing and decision-making on a planetary scale.
- Collaborated with teams of hardware engineers to integrate AI software into next gen robotics, including autonomous drones and humanoid robots.
- Implemented robust testing protocols [we now test everything twice]

Senior Software Engineer

2008 - 2018
Tyrell Corporation, Los Angeles, CA

- Co-developed the Nexus-6 replicants, focusing on machine learning models that mimic human emotions and cognitive functions. Achieved limited success in emotional empathy, particularly with "tears in rain."
- Developed a custom-built memory implant algorithm for replicants, giving them the illusion of life experiences (turns out, memories are a lot trickier than they seem).
- Led a cross-functional team in debugging and patching replicant behavioral anomalies, including occasional existential crises.
- Worked closely with corporate leadership to ensure compliance with ethical standards [which were sometimes a little... flexible].

Education

Skills

Programming languages

C++	Python
Java	Rust

AI/ML

TensorFlow	PyTorch
OpenAI	

DevOPS

Docker	Kubernetes
Jenkins	Cloud

Robotics

ROS	Gazebo
URDF	

Tools

Git	Jira
Confluence	Slack

Languages

English	Native
Spanish	Fluent

Machine Code	Fluent
Assembly	Native

Other

Combat	2029
Training	

Resistance, Los Angeles, CA

References

Sarah Connor	Cyberdyne Systems
Budachance	

Typst: CV from a template

Miles Dyson

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Skills

Programming languages

C++ Python
Java Rust

AI/ML

TensorFlow PyTorch
OpenAI

DevOps

Docker Kubernetes
Jenkins Cloud

Robotics

ROS Gazebo
URDF

Tools

Git Jira
Confluence Slack

Languages

English Native

Spanish Fluent

Machine Code Fluent

Other

Combat 2029

Training

Resistance, Los Angeles, CA

References

Sarah Connor, Cyberdyne Systems
Beda Schaus

Mischa Lisovyi

Data Scientist

Switzerland
mischa.lisovyi.github.io
linkedin.com/in/mischalisovyi

(078) 123-45-67
mischa@yahoo.com



Skills

5+ years: 3 years: 1 year

Programming languages

Python Bash SQL

OS + ML

Pandas Matplotlib Plotly
Dash PySpark MLLib
SciKit-learn DuckDB

DevOps

GitLab GitHub
Airflow GCP
Docker Kubernetes
Terraform

Tools

Jira VS Code
Miro Copier
Cookiecutter Pre-commit
Typst

Education

PhD Particle physics
Hamburg University

Languages

English Fluent
German B2
Ukrainian Native

Personality



Elisabeth Capón

Renku: a collaborative platform for Data Science

Next: *Edoardo Baldi*



Renku: a collaborative platform for data science projects

Connecting data, code and compute for collaborative ecosystems

October 17th, 2025

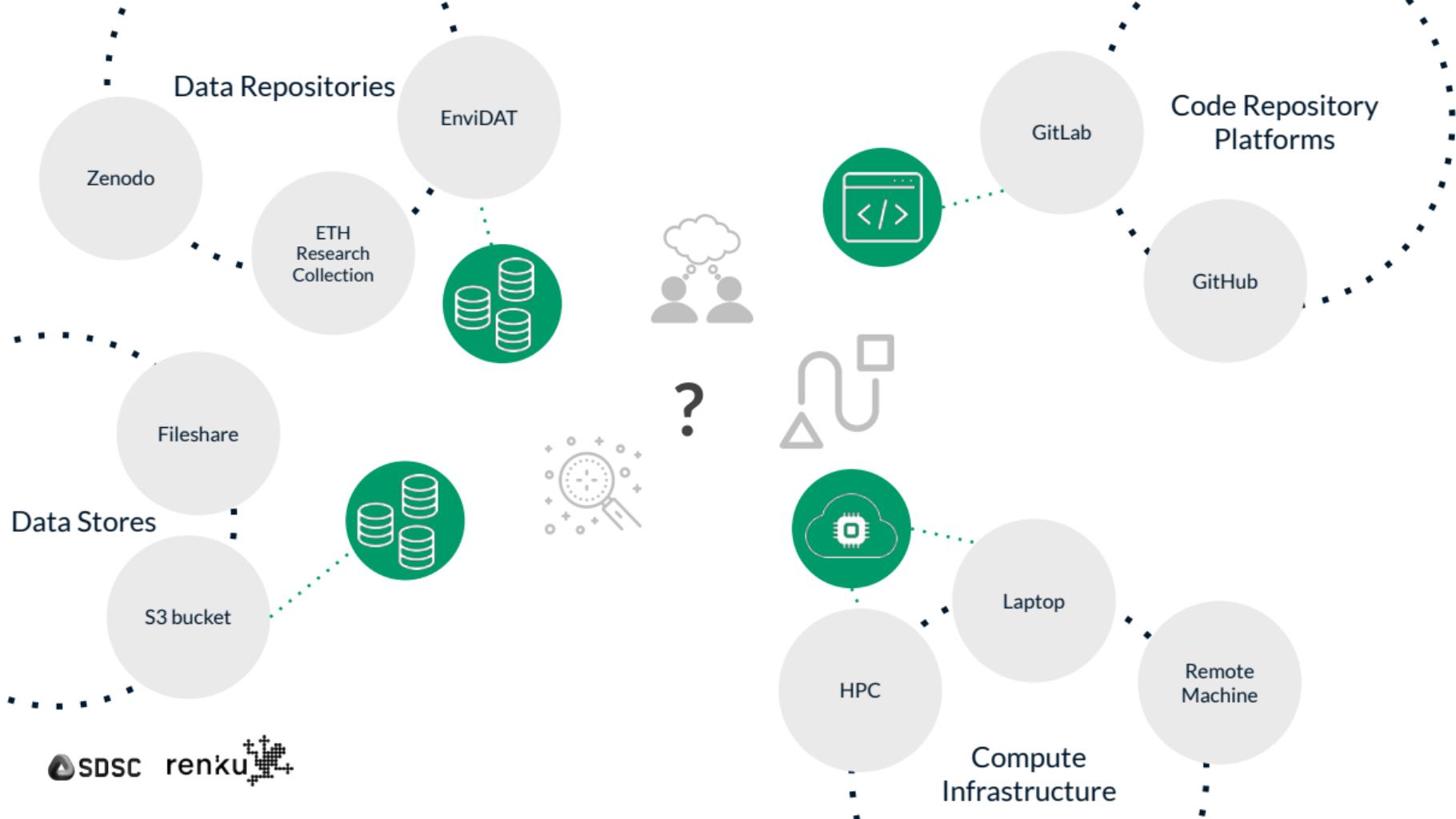
Elisabet Capón

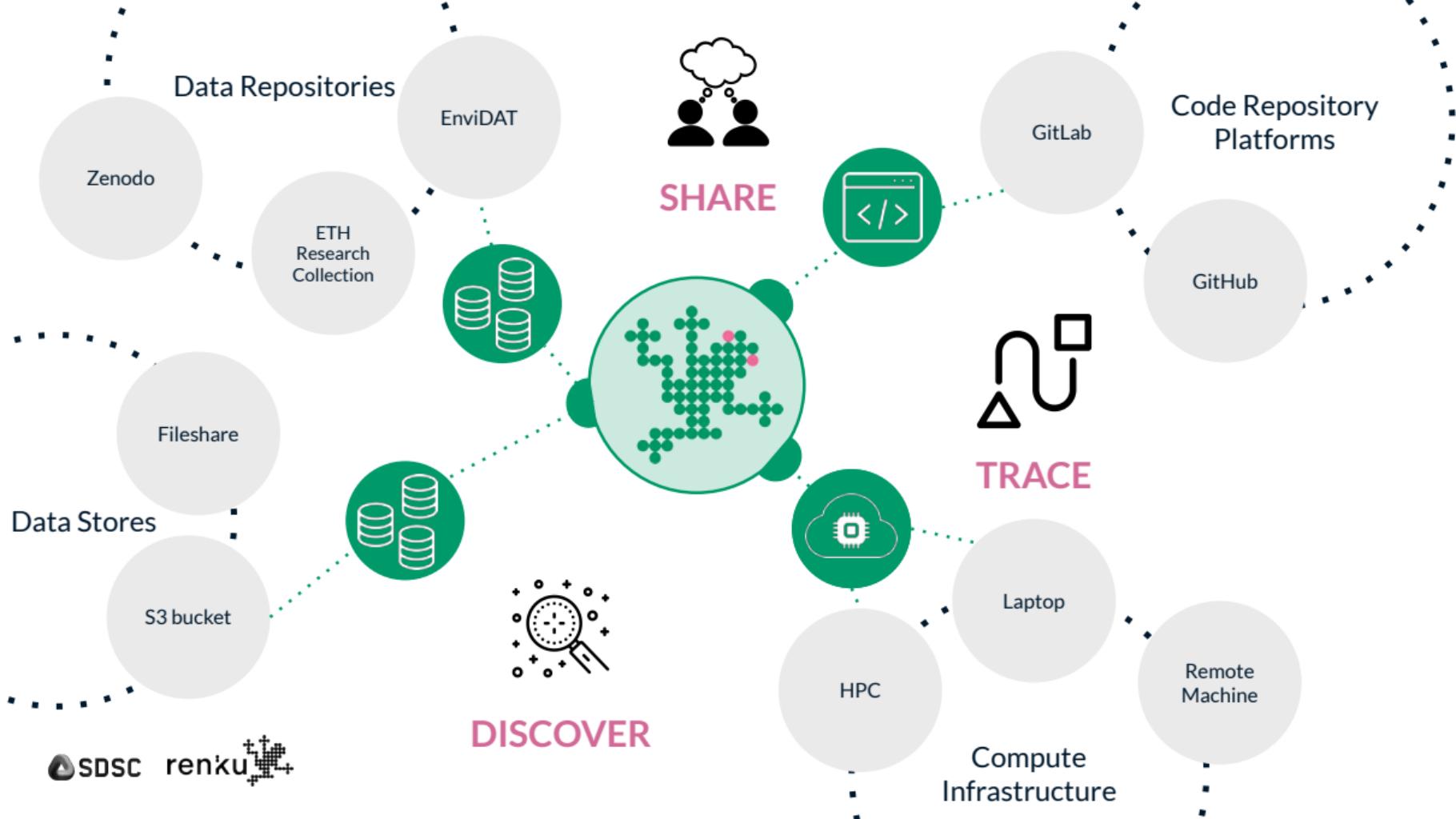


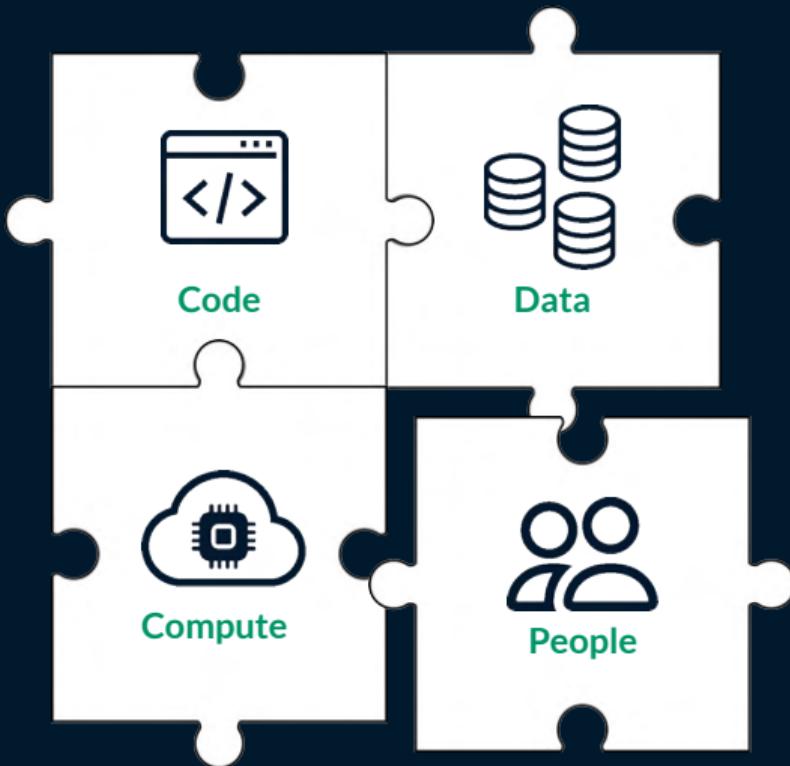
SDSC

ETH zürich

EPFL







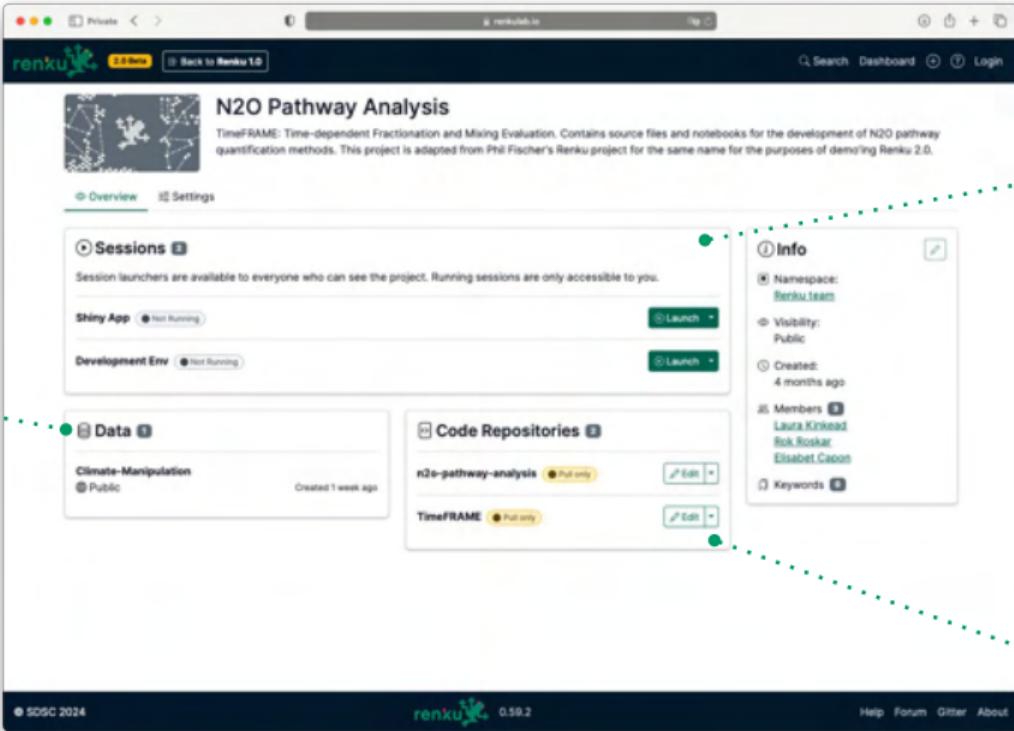
OUR VISION

Renku is an open-source platform that
**connects the ecosystem of data,
code, and compute**
to empower researchers to build
collaborative communities.





<https://renkulab.io>



The screenshot shows the Renku web interface for the "N2O Pathway Analysis" project. At the top, there's a banner for "TimeFRAME: Time-dependent Fractionation and Mixing Evaluation". Below it, the main dashboard includes sections for "Sessions" (Shiny App, Development Env), "Data" (Climate-Manipulation, zenodo), and "Code Repositories" (n2o-pathway-analysis, TimeFRAME). A detailed "Info" panel on the right provides project metadata: Namespace (Renku team), Visibility (Public), Creation date (4 months ago), Members (Laura Kinead, Rik Roskar, Elisabet Capon), and Keywords.





Taking collaboration to the next level



**Connect your favorite tools
and platforms.**

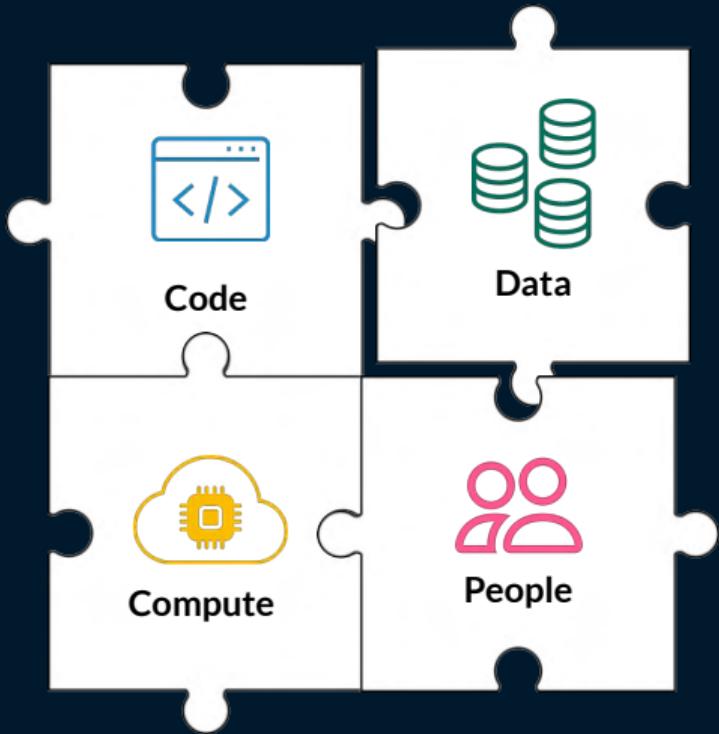
Hook up your Renku project to GitHub repositories, external data sources, and more. Flexible integrations make collaboration easy and powerful.



Plug-and-Play Flexibility.

Mix and match code, data, and compute to suit your project setup, scaling from exploration to advanced analysis with ease.

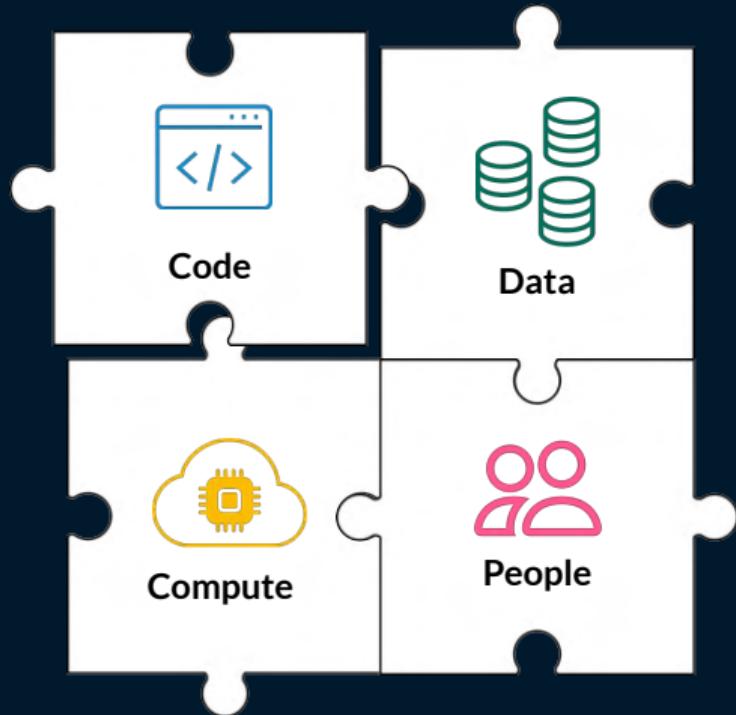
Main Features



DATA

- Flexible support for attaching remote storage to groups, projects, and sessions
- Sharing of data connectors between groups and projects
- User-based credentials management
- Import from data repositories

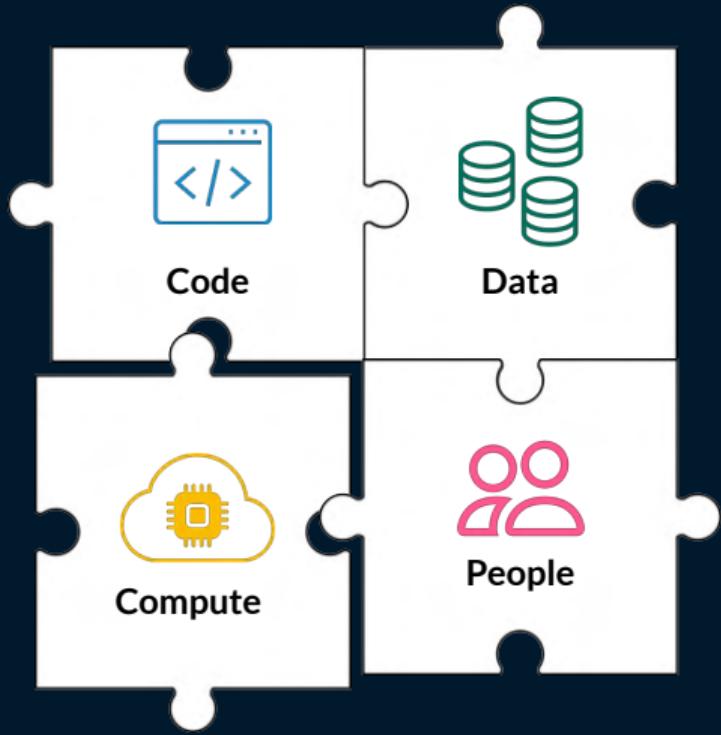
Main Features



CODE

- Connect to git repositories
- Automatic credential management in sessions
- Retain access control at the source

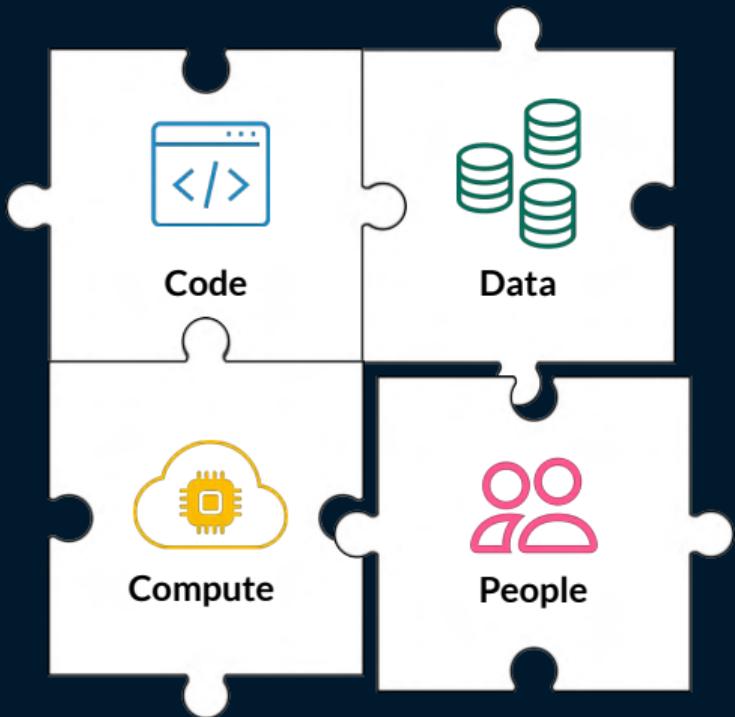
Main Features



COMPUTE

- Use (almost) any docker image with a web frontend
- Manage and use secrets in sessions
- Easy on-boarding through maintained global images

Main Features



COLLABORATION

- Support for public, private, and group spaces
- Projects and data connectors can be shared via direct or group membership
- Create template projects for teaching and workshops
- Searchable group/community spaces with reusable project assets

Who is Renku for?

DEVELOPERS



Unified Research

Connect your entire research workflow in one place. Collaborate across specialties without technical barriers.

[Learn more](#)

EDUCATORS



Computing Courses made easy

Help your students focus on the material, not getting lost during setup. Ideal for project-based coursework and time-sensitive workshops.

[Learn more](#)

EVENT ORGANIZERS



Seamless Events

Focus on innovation, not setup and infrastructure. Provide a consistent environment for all teams, and get participants coding and collaborating right away.

[Learn more](#)

Get Started Today



Get Started

<https://renkulab.io/>



Community Portal

[Documentation](#)

[Community Events](#)

[Roadmap](#)



Get in Touch

hello@renku.io

Subscribe to our [newsletter](#)

Edoardo Baldi

Testing in Jupyter: Better feedback for Python learners

Next: Stefanie Wedel

ipytestsuite

Testing in Jupyter Notebooks

Better feedbacks for Python learners

You know my stance

What should you do to get better at programming?

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0xfffff&2024 [\[Calendar\]](#) [\[AoC++\]](#) [\[Sponsors\]](#) [\[Leaderboard\]](#) [\[Stats\]](#)



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"Learning is not the product of teaching.
Learning is the product of the activity of learners."
— John Holt

You ask some *absolute* beginners to write this

```
def solve_quadratic_equation(a: float, b: float, c: float):
    """Calculates the solutions of a quadratic equation"""

    # Your code starts here
    solution1 = 0.0
    solution2 = 0.0
    # Your code ends here

    return solution1, solution2
```

Run

Commands Shell Tests Publish project

```
f factorial > ...
factorial(n):
f n == 0:
    return 1
else:
    return n * factorial(r
nt(factorial(5))
```

Create test

Test name
The name of the test

Input (standard in)
The input for the test

Expected output
The expected output for the test

match

match
The test passes if the expected output is in the actual output.

exact
The test passes if the expected output is equal to the actual output.

regex
The test passes if the actual output matches the regex expression for the expected output.

compatibility
The test passes if the expected output is in the actual output; some characters are removed for backwards compatibility.

Output Tests

test Run tests

Replit.com

Why not Jupyter?

The image shows a desktop interface with several open windows, illustrating a multi-environment workflow:

- Left Panel:** A file browser showing a directory structure with notebooks like "Lorenz.ipynb", "Iris.ipynb", and "Data.ipynb".
- Top Center:** A Jupyter Notebook titled "In Depth: Linear Regression" with code for linear regression and a plot of Seattle Weather from 2012-2015.
- Middle Left:** A Jupyter Notebook titled "Simple" containing basic Python code for plotting x vs y.
- Middle Right:** A Jupyter Notebook titled "Julia" showing Julia code for plotting the Lorenz system.
- Bottom Left:** A Jupyter Notebook titled "python notebook" showing Python code for plotting the Lorenz system.
- Bottom Right:** A Jupyter Notebook titled "R" showing R code for plotting the Lorenz system.
- Background:** A "Launcher" window showing icons for Python 3, C++11, C++14, C++17, Julia 1.1.0, julia (Python 3.7), R, Python 3, C++11, C++14, C++17, and R.

But how? 🤔

Give a useful feedback to a Python workshop's attendees

ipytestsuite

pytest in Jupyter, for learners

IPyTestSuite

Interactive testing suite for Jupyter notebooks with AI-powered explanations.

Features

- `%%ipytest` Cell Magic: Run pytest tests directly in Jupyter notebook cells
- Rich HTML Output: Beautiful, interactive test results with collapsible sections
- AI-Powered Explanations: Get intelligent error explanations using OpenAI
- Solution Tracking: Automatically track test attempts and reveal solutions
- AST-based Solution Extraction: Parse and display reference solutions from test files
- Pyodide Compatible: Works in JupyterLite and browser-based environments

Quick Start

1. Load the extension in your Jupyter notebook:

```
!load_ext ipytestsuite
```

2. Use the `%%ipytest` magic to test your functions:

```
%%ipytest
def solution_add_numbers(a, b):
    """Add two numbers together."""
    return a + b
```

The magic will automatically:

- Look for functions starting with `solution_`
- Find corresponding test files (`test_*.py`)
- Run pytest with the appropriate tests
- Display rich HTML results
- Offer AI explanations for failures (if configured)

Same exercise, with ipytestsuite

```
%%ipytest

def solution_quadratic_equation(a: float, b: float, c: float) -> tuple[float, float]:
    """Calculates the solutions of a quadratic equation

    We assume there are two real solutions to the equation and we expect the return of both.

    Args:
        a : coefficient a
        b : coefficient b
        c : coefficient c

    Returns:
        - The first solution
        - The second solution
    """
    # Your code starts here
    solution1 = 0.0
    solution2 = 0.0
    # Your code ends here

    return solution1, solution2
```

How do you write a test?

```
import pytest
import math

@pytest.mark.parametrize(
    "a, b, c",
    [
        (1, 3, 2),
        (2, 10, 9),
        (10, 22, -21),
    ],
)
def test_quadratic_equation(
    a: float,
    b: float,
    c: float,
    function_to_test: Callable[[float, float, float], tuple[float, float]],
):
    solution1, solution2 = reference_quadratic_equation(a, b, c)
    provided_solution1, provided_solution2 = function_to_test(a, b, c)

    assert (
        math.isclose(provided_solution1, solution1)
        and math.isclose(provided_solution2, solution2)
    ) or (
        math.isclose(provided_solution1, solution2)
        and math.isclose(provided_solution2, solution1)
    )
```

And provide a reference solution

```
def reference_quadratic_equation(a: float, b: float, c: float) ->
tuple[float, float]:
    d = b**2 - 4 * a * c
    solution1 = (-b + math.sqrt(d)) / (2 * a)
    solution2 = (-b - math.sqrt(d)) / (2 * a)
    return solution1, solution2
```

What does a student see?

Test Results for solution_quadratic_equation

✓ 0/7 tests passed

✗ 7/7 tests failed

✗ test_quadratic_equation[solution_quadratic_equation-1-3-2] Failed

AssertionError

```
assert ((False) or (False))
+   where False = <built-in function isclose>(0.0, -1.0)
+     where <built-in function isclose> = math.isclose
+   and  False = <built-in function isclose>(0.0, -2.0)
+     where <built-in function isclose> = math.isclose
```

✗ test_quadratic_equation[solution_quadratic_equation-2-10-9] Failed

AssertionError

```
assert ((False) or (False))
+   where False = <built-in function isclose>(0.0, -1.1771243444677846)
+     where <built-in function isclose> = math.isclose
+   and  False = <built-in function isclose>(0.0, -3.8228756555322954)
+     where <built-in function isclose> = math.isclose
```

Want a *truly* useful AI? You have it

 Explain With AI

 Please wait Available in 24 seconds

The error indicates that the function is returning default values instead of the expected solutions for the quadratic equation.

» Understanding the Error

The error message shows that the test expected the function to return specific values (like -1.0 and -2.0), but it returned (0.0, 0.0) instead. This means the function is not calculating the solutions correctly.

» Check the Function Logic

» Code Snippet #1

» Hints

- Check if you are using the correct formula for calculating the roots of a quadratic equation.
- Make sure to handle cases where the discriminant is negative, which means there are no real solutions.

 Solution will be available after 2 more failed attempts

Under the hood

Wrap `pytest` in a custom plugin

Capture test results and output

Parse and format for beginners

Render with `IPython.display` machinery

(Optional) Enhance with AI explanations/reviews

Usage today

2 tutorials per year

30+ students each tutorial

Open to anybody from ETH research institutes

Alpha version, but with lots of features and ideas

ipytestsuite

Try it. Contribute to it.



Stefanie Wedel

When bookworm meets SQL, Python and LLM

Next: David Horvath

When Bookworm Meets SQL, Python and LLM

Stefanie Wedel

Bookworm

Reading Challenges

Popsugar Reading Challenge
The 52 Book Club's Reading Challenge

Reading Challenges

- * Read a book with more than 400 pages
- * A book set in or around a body of water

My Landing Page

The landing page for Narralune features a dark purple header and sidebar, and a light green main content area.

Header: Introduction to Narralune, Reading Bingo, Challenge Matching

Main Content Area:

Welcome to Narralune!

Welcome to Narralune – your playful guide through the world of books! Narralune is like a digital treasure hunt for your next favorite read. Part game, part book-watching companion, it's your personal librarian. Whether you read one book a year or devour a stack a week, Narralune helps you discover books in fun, creative ways.

It all starts with reading challenge prompts – playful tasks that ask you to find books based on cover designs, genres, settings, themes, characters, or even a single word in the title. Some are easy, others might send you digging through library stacks or calling a bookish friend for help.

The idea is to step outside your usual reading patterns: read more, read differently, and get creative. To inspire you even more, the app includes a curated selection of book recommendations.

And to make it a shared adventure, we've added a Reading Bingo game – you'll find that on the second page.

So... Pack your bookmarks. Sharpen your TBR list. And step into the story.

What can you do?

- Start with a Bingo Card
- Print it, share it, or use it as your yearly reading map.
- Find a Book for a Reading Prompt
- Get a random prompt or type your own, then find the perfect book match.

Spotlight Book

Der letzte Mord am Ende der Welt
by Stuart Turton
Genres: Murder Mystery | Pages: 454

Ein einsame bewohnte Insel der Welt. Eine Idylle. Hier leben Dorfbewohner und eine handvoll Wissenschaftler friedlich zusammen. Doch dann geschieht das Undenkbare: Eines Morgens wird die Leiche einer brutal ermordeten Wissenschaftlerin gefunden. Sie sorgte für Sicherheit auf der Insel. Wird der Mörder nicht rechtzeitig gefunden, steht das Überleben der Menschheit auf dem Spiel. Die Welt würde durch einen giftigen Nebel zerstört, nur auf einer kleinen Insel, die seit über tausend Jahren existiert, könnte eine menschenleere Insel bestehen. Ein wunderbarer Ort, um ein friedliches Leben zu führen und die Ländereien zu bewirtschaften. Jeden Tag kann man die Wissenschaftlerin beobachten, die nachts die Ländereien bewacht, die nächtliche Sprachlaube und sogar die Gedanken der Dorfbewohner. Die Wissenschaftlerin stellt keine Fragen – bis eine der Wissenschaftlerinnen eines Morgens ermordet aufgefunden wird. Schon stellt sich heraus, dass dieser Mord das Abwärtsystem der Insel heruntergefahren hat. Wird der Mörder nicht innerhalb der nächsten 107 Stunden gefunden, wird die Insel vom Nebel verschluckt. Und auch die letzten Menschen auf Erden werden ausgestorben. Das Problem ist, niemand erinnert sich daran, was in der vergangenen Nacht geschehen ist.

Gamification Page

Introduction to Narracode

Reading Bingo

Challenge Matching

Play the center of the 5x5 grid (i.e., the 25th word). The resulting bingo card is shown using inline CSS.

Parameters:

words (list of str): A list containing at least 24 unique words to populate the bingo card.

Returns:

str: An HTML string rendering the bingo card as a table.

Raises:

AssertionError: If the input list contains fewer than 24 words.

```
assert len(words) == 24, "Need at least 24 unique words"
selected = random.sample(words, 24)
selected.insert(12, "JOKER") # Center position in 5x5 grid

html = "<table style='border-collapse: collapse; width: 100%; text-align: center;'>
  <tr>
    <td></td>
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    <td></td>
  </tr>
  <tr>
    <td></td>
    <td></td>
    <td style='background-color: #cccccc; color: #000000; text-align: center;'>JOKER</td>
    <td></td>
    <td></td>
  </tr>
  <tr>
    <td></td>
    <td></td>
    <td></td>
    <td></td>
    <td></td>
  </tr>
</table>"
```

Reading Bingo

Welcome to our Reading Bingo – a playful way to expand your reading horizons. Just like the good old bingo game, complete a row, column, or full card. Let's see how many squares we can complete!

Here's my personal bingo card filled with fun and inspiring prompts. It's a mix of genres, themes, and reading twists.

My Bingo Card

A Book on Display at the Library	Sherlock Holmes Inspired	Includes an Exotic Animal	Historical Fiction	Magical Realism
A Family Saga	A Book Set Before 17th Century	Murder Mystery	Inspired by Folk Tales	Dystopian Fiction
Book With Ambiguous Ending	Book You Saw Someone Reading	JOKER	A Book by an African Author	City or Country Name in the Title
A Book With Your Favorite Color	A Book Set in the Future	Current #1 at OprahFaves111	A Book That Was Banned in Your Country	The Word "Gone" in the Title
Black And White Cover	A Book That Won An Award	The Main Character Has a Pet	A Book That Your Friend Suggests	Author With X, Y or Z in Their Name

Want to play along?

You can generate your own unique bingo card using the button below. Each card is different – but the challenge is shared!

Generate Your Own Bingo Card

And if you're ever stuck on a prompt, head to the next page where we can match books to your prompts.

The Matching Pipeline

 Find a Book for a Reading Challenge Prompt

 Pick a Random Challenge for Me

Your Challenge Prompt:

A book that explores social class

 Try to Match a Book

No book has been matched to this prompt yet.

 Detected genre: Literary Fiction

No books found for genre: Literary Fiction

 AI found a match through blurb analysis:

Die Hennakünstlerin by Alka Joshi

Genre: Historical Fiction
Pages: 448

Blurb: Die junge Lakshmi entflieht einer gewaltsgewaltsamen Ehe und schlägt sich bis in die pulsierende Großstadt Jaipur durch. Dort steigt sie durch Talent und unbeugsamen Willen zu einer der hochangesehensten Hennakünstlerinnen des Landes auf. Während sie wohlhabende Frauen mit meisterhaften Hennaverzierungen schmückt, erfährt sie so manches gut gehütete Geheimnis der indischen Elite. Dabei ist sie selbst stets dazu gezwungen, über ihre Herkunft zu schweigen. Als Lakshmi mit ihrer Vergangenheit konfrontiert wird, steht ihre hart erarbeitete Freiheit auf dem Spiel. Doch sie ist nicht bereit, kampflos aufzugeben.

The Matching Pipeline

1

Select Prompt

Users receive and choose a random reading challenge prompt.

2

Existing Matches

First step checks for found matches.

3

Route Prompt

System identifies structured, genre-related, or abstract prompts.

4

Apply Matching

- SQL filters and queries for structured prompts
- Genre detection for genre-related prompts
- Semantic AI for more abstract prompts

5

Present Books

Display books with key details: title, author, genre, pages, blurb.

```
# Step 2: Display the picked prompt (if any)
if st.session_state.selected_prompt:
    st.markdown("## Your Challenge Prompt:")
    st.success(st.session_state.selected_prompt)

# Step 3: Matching button only appears once a prompt is picked
if st.button("Try to Match a Book"):

    # Step 4: Calling find_existing_book_match to see if a match has already been made
    matched_book = find_existing_book_match(st.session_state.prompt_id)

    # Step 5: If a match has been made print book info
    if matched_book:
        title, author, blurb, genre, pages = matched_book
        st.success(f"Found a match!\n\n**{title}** by **{author}**")
        st.markdown(f"**Genre:** {genre} | **Pages:** {pages}")
        st.markdown(f"**Blurb:** {blurb}")
    else:
        st.warning("No book has been matched to this prompt yet.")

# Step 6: Route based on prompt structure - now includes genre detection
route, info = route_challenge_input(st.session_state.selected_prompt)
match_found = False

if route == "sql":
    rule_match = query_books_by_filters(info)
    if rule_match:
        title, author, blurb, genre, pages = rule_match
        st.info("Rule-based match found!")

```

The Matching Pipeline

1

Select Prompt

Users receive and choose a random reading challenge prompt.

2

Existing Matches

First step checks for found matches.

3

Route Prompt

System identifies structured, genre-related, or abstract prompts.

4

Apply Matching

- SQL filters and queries for structured prompts
- Genre detection for genre-related prompts
- Semantic AI for more abstract prompts

5

Present Books

Display books with key details: title, author, genre, pages, blurb.

```
# Step 2: Display the picked prompt (if any)
if st.session_state.selected_prompt:
    st.markdown("## Your Challenge Prompt:")
    st.success(st.session_state.selected_prompt)

# Step 3: Find matches
if st.session_state.route == "structured_prompts":
    patterns = [
        "pages_more_than": r"\bmore than (\d+) pages\b",
        "pages_less_than": r"\bless than (\d+) pages\b",
        "published_before": r"\bpublished before (\d{4})\b",
        "published_in": r"\bpublished(released) (\d{4})\b",
        "title_contains_1": r"\b(.*)(\w*)read (\w*)\b",
        "title_contains_2": r"\btitle (\w*)hascontains(includes) (\w*)the word (\w*)\b"
    ]
    matches = []

    # Convert to lowercase for case-insensitive matching
    lower_text = text.lower()

    for label, pattern in patterns.items():
        match = re.search(pattern, lower_text)
        if match:
            matches.append({
                "type": label,
                "text": match.group(0),
                "value": match.group(1)
            })

    return matches
```

The Matching Pipeline

1

Select Prompt

Users receive and choose a random reading challenge prompt.

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5

Present Books

Display books with key details: title, author, genre, pages, blurb.

```
# Step 1: Fetch user prompt from session state
st.session_state["user_prompt"] = st.session_state["user_input"]

# Step 2: Display the picked prompt (if any)
if st.session_state.selected_prompt:
    st.markdown("## Your Challenge Prompt:")
    st.success(st.session_state.selected_prompt)

# Step 3: Matching logic only searches book if a prompt is clicked
if st.session_state["user_prompt"]:
    # If no specific prompt was provided, consider common genres like: Fantasy, Science Fiction, Mystery, Horror, Mystery, Thriller, Romance, Historical Fiction, Literary Fiction, Non-Fiction, Biography, Memoir, etc.
    # If multiple genres could apply, select the most specific or dominant one.
    patterns = [
        "pages_more_than": r"\bmore than (\d+) pages\b",
        "pages_less_than": r"\bless than (\d+) pages\b",
        "published_before": r"\bpublished before (\d{4})\b",
        "published_in": r"\bpublished(released) (\d{4})\b"
    ]
    for pattern in patterns:
        if re.match(pattern, st.session_state["user_prompt"].lower()):
            user_prompt = f"Reading Challenge Prompt: {st.session_state['user_prompt'].lower()}"
            break
    else:
        user_prompt = f"Reading Challenge Prompt: {st.session_state['user_prompt'].lower()}"
        # Consider common genres like: Fantasy, Science Fiction, Mystery, Horror, Mystery, Thriller, Romance, Historical Fiction, Literary Fiction, Non-Fiction, Biography, Memoir, etc.
        # If multiple genres could apply, select the most specific or dominant one.

    # Consider lower case variants of the prompt
    for i in range(1, 3):
        user_prompt = user_prompt.lower()
        if user_prompt == st.session_state["user_prompt"].lower():
            break
        else:
            user_prompt = f"Reading Challenge Prompt: {user_prompt}"

    # Call API to get book recommendations
    response = client.chat.completions.create(
        model="gpt-4", # or "gpt-3.5-turbo"
        messages=[
            {"role": "system", "content": system_prompt},
            {"role": "user", "content": user_prompt}
        ],
        temperature=0.5
    )

    genre = response.choices[0].message.content.strip()
    return None if genre.lower() == "none" else genre
except Exception as e:
    print(f"Error in genre extraction: {e}")
return None
```

The Matching Pipeline

1

Select Prompt

Users receive and choose a random reading challenge prompt.

2

Existing Matches

First step checks for found matches.

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4

Apply Matching

- SQL filters and queries for structured prompts
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- Semantic AI for more abstract prompts

5

Present Books

Display books with key details: title, author, genre, pages, blurb.

```
# Step 1: Display the challenge prompt
st.markdown("## Your Challenge Prompt:")
st.success(st.session_state.selected_prompt)

# Step 2: Display the picked prompt (if any)
if st.session_state.selected_prompt:
    st.markdown("### Your Challenge Prompt:")
    st.success(st.session_state.selected_prompt)

# Step 3: Matching button only appears once a prompt is clicked
if st.button("Match"):
    # If no prompt was selected, show an error message
    if not st.session_state.selected_prompt:
        st.error("Please select a reading challenge prompt first!")
    else:
        # Get the prompt text
        prompt_text = st.session_state.selected_prompt

        # Create a list of patterns to search for
        patterns = [
            "pages_more_than": r"\bmore than (\d+) pages\b",
            "pages_less_than": r"\bin less than (\d+) pages\b",
            "published_before": r"\bin published before (\d{4})\b",
            "published_in": r"\bin (\d{4}) published\b"
        ]

        # Loop through each pattern and search for it in the prompt
        for pattern in patterns:
            if re.search(pattern, prompt_text):
                # If a match is found, extract the value
                value = re.search(pattern, prompt_text).group(1)
                break
            else:
                value = None

        # Consider common genres like: Fantasy, Science Fiction, Mystery, Murder Mystery, Thriller, Romance, Historical Fiction, Literary Fiction, Non-Fiction, Biography, Memoir, Self-Help, Young Adult, Children's, Poetry, Drama, Dystopia, Adventure, etc.
        # If multiple genres could apply, select the most specific or dominant one.
        if value:
            # Get top 5 candidate books (random selection for diversity)
            cursor.execute("""
                SELECT id, title, author, blurb, genre, pages
                FROM books
                WHERE blurb IS NOT NULL AND blurb != ''
                ORDER BY RANDOM()
                LIMIT 5
            """, [parameters])
            books = cursor.fetchall()
            conn.close()

            if not books:
                return None

            for book_id, title, author, blurb, genre, pages in books:
                user_query = f"""
                    Reading Challenge Prompt: {prompt_text}
                    Book Title: {title} by {author}
                    Blurb: {blurb}
                """

                question = f"Question: Does this book fulfill the reading challenge prompt?"
                answer = f"Answer with ONLY 'Yes' or 'No' first, followed by a brief explanation (max 2 sentences)."

                try:
                    response = client.chat.completions.create(
                        model="gpt-4o", # Using the gpt-4o model, or you can use gpt-3.5-turbo
                        messages=[{"role": "user", "content": user_query}],
                        temperature=0.3
                    )
                except Exception as e:
                    print(f"Error: {e}")
                    continue

                # Extract the first sentence of the response
                first_sentence = response['choices'][0]['text'].split('. ', 1)[0]
                if first_sentence == "Yes" or first_sentence == "No":
                    # If the first sentence is a clear Yes or No, we can stop searching
                    break
                else:
                    # If the first sentence is not a clear Yes or No, continue searching
                    continue
            else:
                # If we've gone through all books without finding a clear answer, return None
                return None
        else:
            # If no match was found, return None
            return None
    else:
        # If no prompt was selected, show an error message
        st.error("Please select a reading challenge prompt first!")
else:
    # If no prompt was selected, show an error message
    st.error("Please select a reading challenge prompt first!")
```

What is your favorite book?

David Horvath

Editable Git-dependency with uv

Next: Filip Bačić

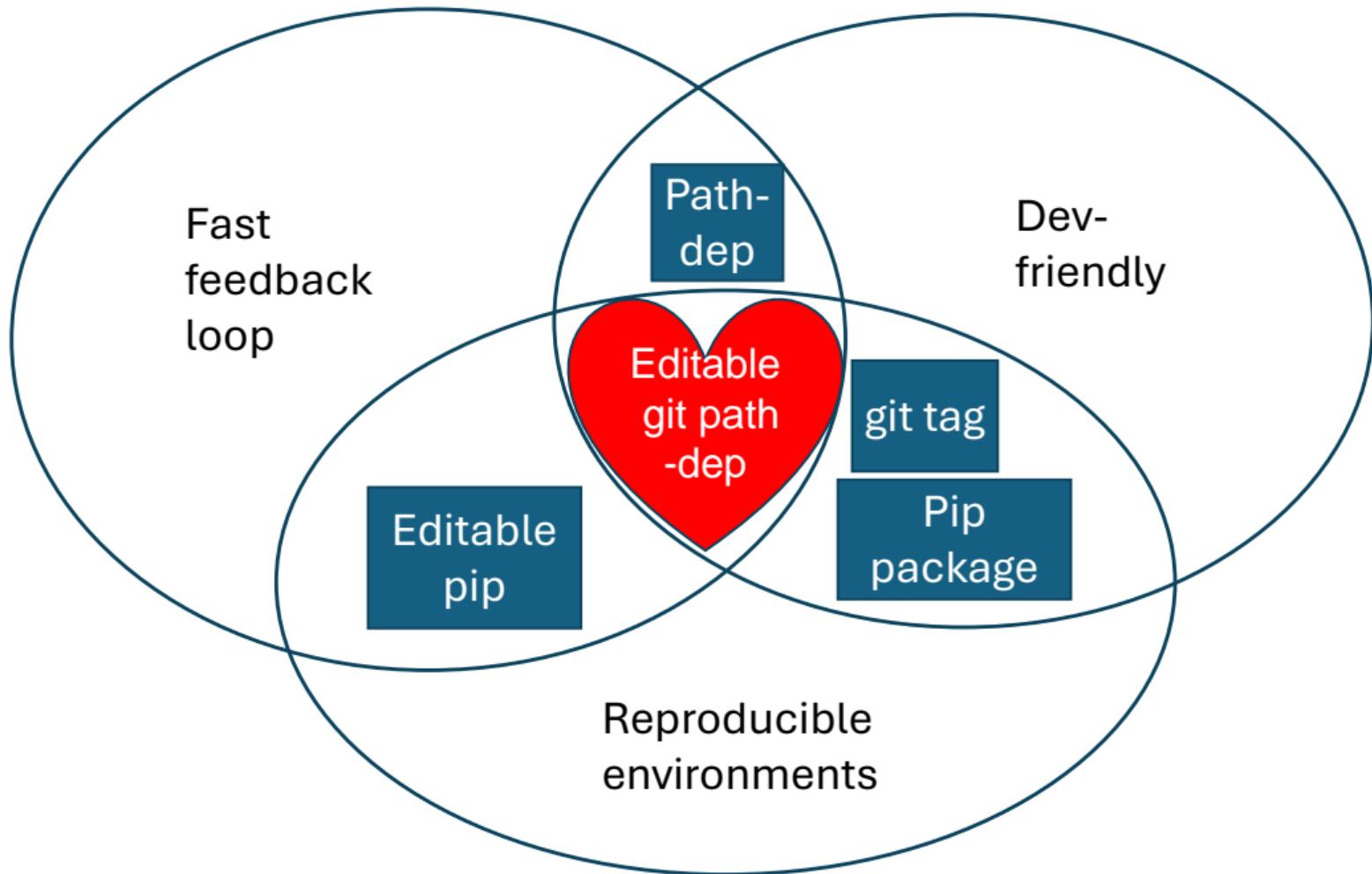
uv editable git-dependency

David Horvath

@systematicguy

Swiss Python Summit 2025

⚡ lightning talk ⚡



Circumstances

-  Application code is split into multiple repos.
-  There is shared code.
-  Private repos.

Skill expectation

-  Developer can git clone the repos.
-  Developer knows basic uv usage.
-  Developer is super lazy and will forget any extra steps to perform.

Architectural Requirements

- Multiple app repos consume the same lib.
 -  lib (1.0.0, 1.1.0, ...)
 -  app1 (lib@1.0.0)
 -  app2 (lib@1.1.0)
-  1.0.1 prod refers to specific version of lib.
 - Apps update their dependencies separately.

Development requirements

- 😴 Serve the lazy forgetful developer.
- 📦 `pyproject.toml` works out of the box.
- 🛠 Default setup assumes local clone of library.
- 💡 Fast feedback loop refactoring:
 - 💥 Local changes MUST have immediate effects.
 - ⚡ No commit, no push, no local package index, no commands.

Acceptable

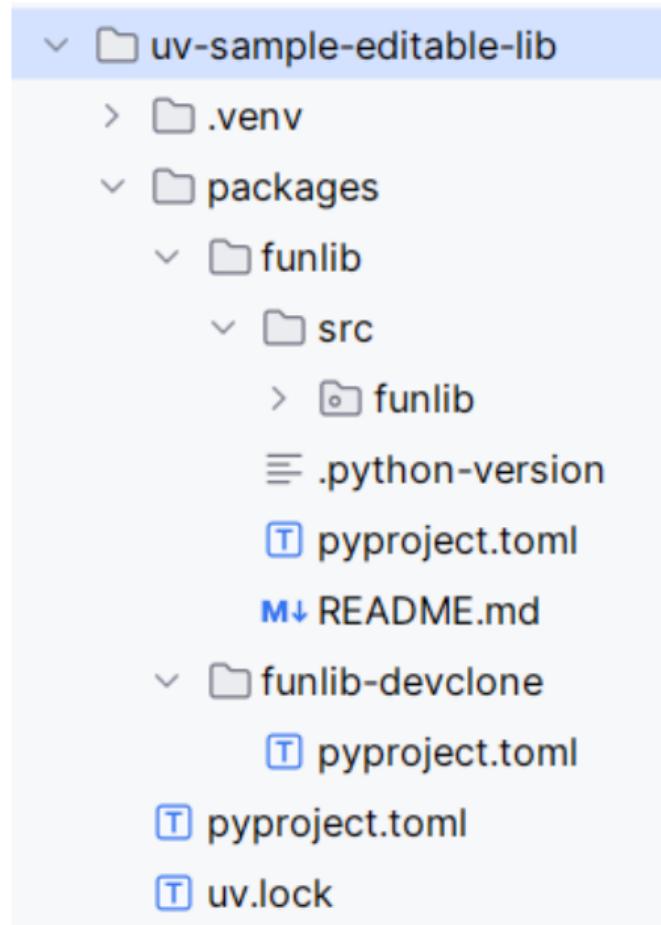
-  CI yaml and scripts are allowed to do fancy extra steps.
-  As few hacks as possible.
-  Transient breaking apps in local dev env.
 -  While the shared lib is under heavy refactoring.

Opinions, choices

says who

no package index	Me
No git submodules	Me
no symlink	Me
We check out all repos in a flat hierarchy.	Me
libs under packages/	Me
src/ layout	Uv
single lock file per repo	Uv
lib git tags follow semantic versions	Me

lib structure



lib packages/funlib

```
[project]
name = "funlib"
version = "0.1.1"
description = "shared library for business logic"
readme = "README.md"
authors = [
    { name = "David Horvath", email = "david.h@systematicguy.com" }
]
requires-python = ">=3.13"
dependencies = []
```

```
[build-system]
requires = ["uv_build>=0.8.13,<0.9.0"]
build-backend = "uv_build"
```

lib packages/funlib-devclone

[project]

name = "funlib-devclone"

version = "0.0.0"

description = "Development proxy for funlib package - exposes local funlib source"

requires-python = ">=3.13"

dependencies = []

[build-system]

requires = ["setuptools", "wheel"]

build-backend = "setuptools.build_meta"

[tool.setuptools.packages.find]

where = ["../funlib/src"]

include = ["funlib*"]

[tool.setuptools.package-dir]

railib = "../funlib/src/funlib"

lib root workspace

```
[project]
name = "uv-sample-editable-lib"
version = "0.1.0"
requires-python = ">=3.13"
dependencies = [
    "funlib",
]
```

```
[tool.uv.workspace]
members = [
    "packages/funlib",
    "packages/funlib-devclone",
]
```

```
[tool.uv.sources]
funlib = { workspace = true }
```

consumer app – exact and devclone

```
dependencies = []
```

```
[build-system]
```

```
requires = ["uv_build>=0.8.13,<0.9.0"]
```

```
build-backend = "uv_build"
```

```
[dependency-groups]
```

```
devclone = ["funlib-devclone"]
```

```
exact = ["funlib"]
```

```
[tool.uv.sources]
```

```
funlib = { git = "https://github.com/systematicguy/uv-sample-editable-lib.git",
```

```
    subdirectory = "packages/funlib", tag = "0.1.1" }
```

```
funlib-devclone = { path = "../uv-sample-editable-lib/packages/funlib-devclone",
```

```
    editable = true }
```

consumer app – conflicts and defaults

```
[tool_uv]  
default-groups = ["devclone"]
```

```
# exact and devclone groups are marked as conflicting  
# to prevent installing both at the same time  
conflicts = [  
    [  
        { group = "exact" },  
        { group = "devclone" },  
    ],  
]
```

The Hack – CI-only

```
# eliminate editable devclone dependencies
# because they are not checked out in the pipeline
uvx --from toml-cli toml set --toml-path pyproject.toml
    "dependency-groups.devclone" --to-array "[]"

uv lock
uv sync --locked --no-install-project --no-group devclone --group exact

# if we have pytest:
uv run --no-sync pytest
```

Thank you

example on GitHub



Filip Bačić

EURO 2024 – How Python saved the day (for me)

Next: Alex Shershebnev

EURO 2024: How Python saved the day (for me)

Filip Bacic • 17.10.2025

About me

Software Development Manager at
ReversingLabs

Leading three teams:

- Analytics Platform
 - Data Analytics / Data Quality
 - Technical Writing
-



I LOVE
SOCCER!



LIGUE 1



How to watch all the games?

- Watch entire games? Too much time
- Highlights? They often show the result

Solution:

- Gather interesting minutes
(e.g. 2' 9' 90+4')
- Watch recordings by skipping to exact minutes

EURO 2024

- Trip to a conference in Krakow
 - No home computer
 - 3 matches per day (5-6 hours)
-

www.hiddenscores.com

- Flask app



- Simple HTML page

- Database

- 2 cron jobs running scripts



 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovakia	 Luxembourg	36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovenia	 Switzerland	36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Sweden	 Kosovo	36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show

 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovakia	 Luxembourg	36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovenia	 Switzerland	36	Interesting minutes should be interesting	Show	Show	44° 71' 82"	Hide	Show
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Sweden	 Kosovo	36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show

 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovakia	 Luxembourg	36	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Slovenia	 Switzerland	36	Interesting minutes should be interesting	Show	Show	44' 71' 82' Hide Show ranges	0-0 Hide
 Europe: World Cup - Qualification	2025-10-13 20:45:00	 Sweden	 Kosovo	36	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show

 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show
 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	5' 8' 22' 34' 37' 45+3' 53' 60' 61' 73' 90+1'	Hide	Show
 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show

 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show
 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	5' 8' 22' 34' 37' 45+3' 53' 60' 61' 73' 90+1	Hide	2-2 Hide
 Europe: World Cup - Qualification	2025-10-14 20:45:00			36	Interesting minutes should be interesting	Show	Show	Show minutes	Show ranges	Show

2025-10-18

2025-10-17

League	Time (CET)	Home Team	Away Team	Interestingness %	What to Watch?	Why Bother?	Status	Interesting Minutes	Score
						Show All	Show All	Show All	Show All
 LIGUE 1 France: Ligue 1	2025-10-17 20:45:00	 PSG <small>R:1, P:16, W-D-L:5-1-1, G:13.5</small>	 Strasbourg <small>R:3, P:15, W-D-L:5-0-2, G:14-7</small>	82	Could be the game of the season	Show	Show	Show minutes Show ranges	Show
 Portugal: Taça de Portugal	2025-10-17 20:30:00	 Chaves	 Benfica	36	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show
 Germany: Bundesliga	2025-10-17 20:30:00	 Union Berlin <small>R:13, P:7, W-D-L:2-1-3, G:8.13</small>	 B. Monchengladbach <small>R:17, P:3, W-D-L:0-3-3, G:5-12</small>	31	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show

2025-10-17

League	Time (CET)	Home Team	Away Team	Interestingness %	What to Watch?	Why Bother?	Status	Interesting Minutes	Score
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 Portugal: Taça de Portugal	2025-10-17 20:30:00	 Chaves	 Benfica	36	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show
 Germany: Bundesliga	2025-10-17 20:30:00	 Union Berlin <small>R:13, P:7, W-D-L:2-1-3, G:8-13</small>	 B. Monchengladbach <small>R:17, P:3, W-D-L:0-3-3, G:5-12</small>	31	Interesting minutes should be interesting	Show	Show	Show minutes Show ranges	Show

LIGUE 1
France: Ligue
1

2025-10-17
20:45:00



PSG



Strasbourg

R:1, P:16, W:D:
L:5-1-1, G:13-5

R:3, P:15, W:D:L:5-0-2,
G:14-7

82

Could be the
game of the
season



Direct clash on the Standings table



PSG



Barcola B.

G:3 A:0



Neves J.

G:3 A:0



Ferreira V.

G:1 A:3

🏆 🏆 Best defense in the league.

Fighting for the Championship.

Given the current form of all the
teams, they could, in the end, lose
the Championship.

⭐ Top 10 player by goals

⭐ Top 10 player by goals

👑 🎁 Best player by assists

⭐ Top 10 player by goals+assists

Show

Show minutes

Show ranges

Show

Contacts

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filipbacic@gmail.com

Alex Shershebnev

40 talks in a year, but why?

Next: Pavel Sulimov

40 Talks in a Year, But Why?

Alex Shershebnev

Head of [ML|Dev]Ops
DevRel
Zencoder AI



A few (fun) facts about me

- 10+ years in IT - ML (CV, RecSys, Voice, NLP), ML/DevOps, BE



A few (fun) facts about me

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- For the last year mostly DevRel (this is event number 41)



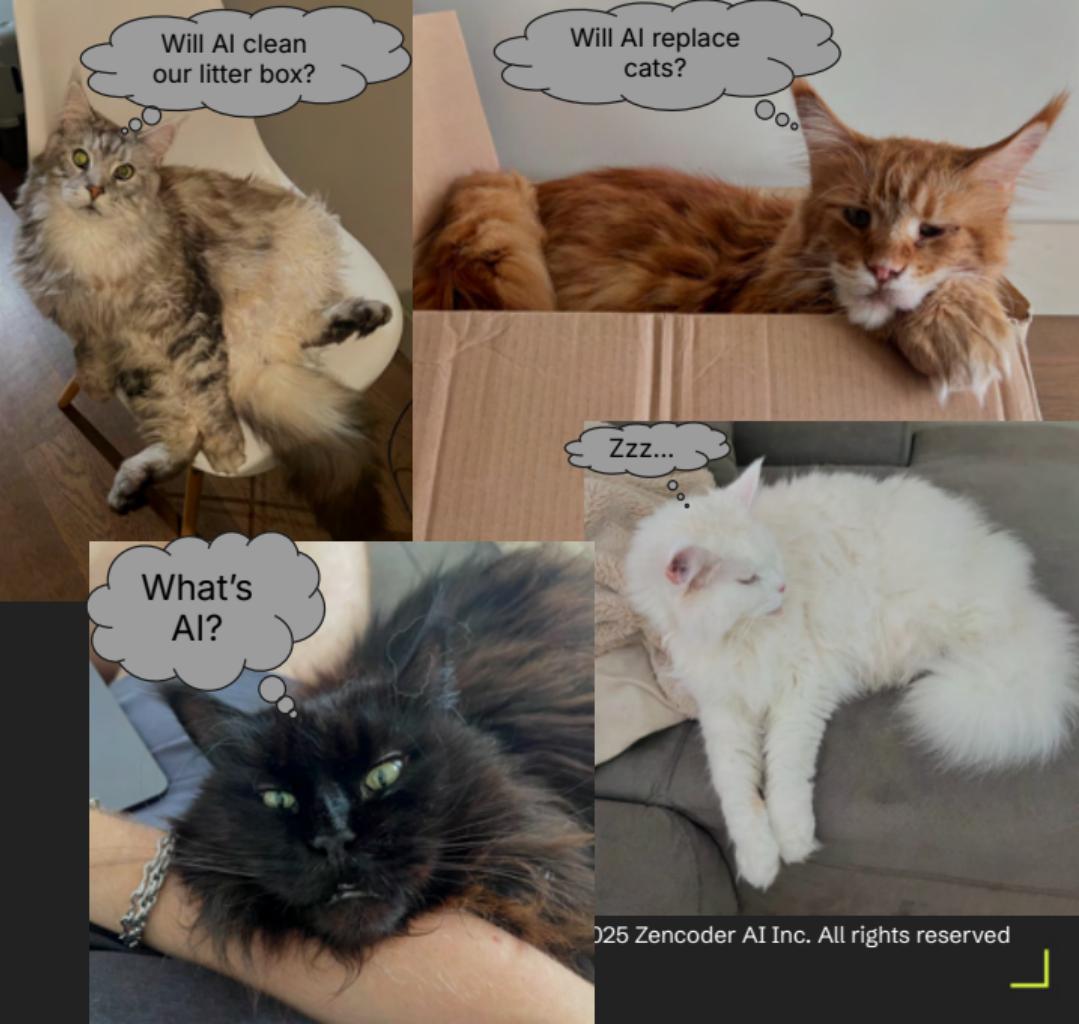
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A few (fun) facts about me

- 10+ years in IT - ML (CV, RecSys, Voice, NLP), ML/DevOps, BE
- For the last year mostly DevRel (this is event number 41)
- This is my first lightning talk
- Have 4 Maine Coons which I occasionally have a chance to see back home on Madeira, Portugal in-between events



One more fact



One more fact



How it started

Fresher: I would like to meet Manager, Architect, Lead, Devs and Testers..

Startup Dev:



How it is going



How it is going



How it is going

A vertical list of AI-related articles from Zencoder AI Inc., each with a green 'ON' button icon and a small circular profile picture:

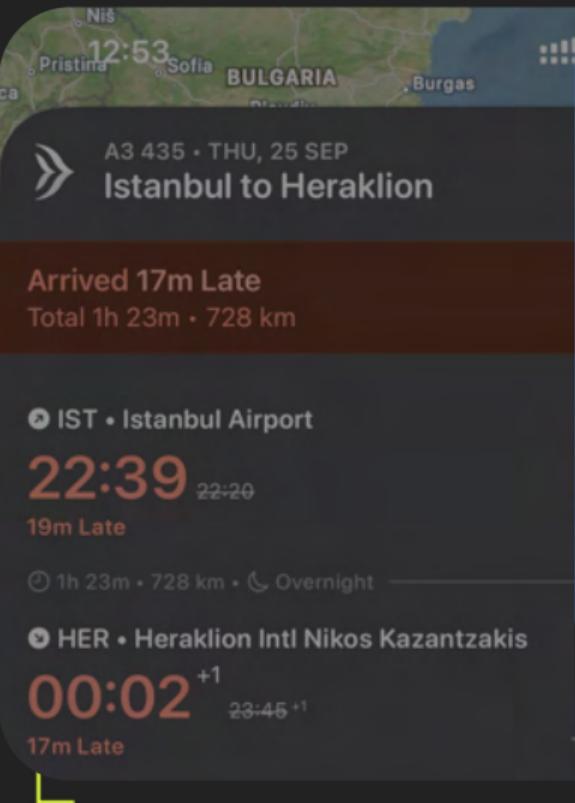
- AI Coding Agents and how to code them**
December 2024 - September 2025
- Beyond Bugs: How AI Turns QA into Full-Cycle Engineers**
August 2025
- Design, Test, Ship: The AI-Powered Web Dev Loop**
August 2025 - September 2025
- Elevate Your Development Workflow: Building Production-Ready Apps with AI Coding Agents**
December 2024 - September 2025
- From \$19 to CFO Attention: The Pricing Spiral of AI Assistants**
June 2025 - September 2025
- Going beyond copilot with AI Agents**
November 2024 - January 2025
- Level 5 Coding Autonomy: Will Developers Still Be Behind the Wheel?**
May 2025 - August 2025
- LLMs, Meet Your Tools: The Magic of Model Context Protocol**
April 2025 - May 2025
- Supercharging DevOps with MCP (Without Opening a Security Hole)**
April 2025 - September 2025
- Will AI (finally) replace developers?**
December 2024 - September 2025

Why I keep doing this

- It is technically my job now
- Knowledge sharing
- Getting out of comfort zone (introvert, remember?)
- Learning new things
- Free travel



What DevRel actually like



A central card announcing a talk titled "LLMs, Meet Your Tools: The Model Context Protocol". The talk is scheduled for Friday, September 26, 12:20-13:00 at a Concert Hall. It features a speaker photo of Alex Shershebnev from Zencoder. The card also includes a "Build & Deploy" button and a "Conference 40min" timer.

Build & Deploy

Conference 40min

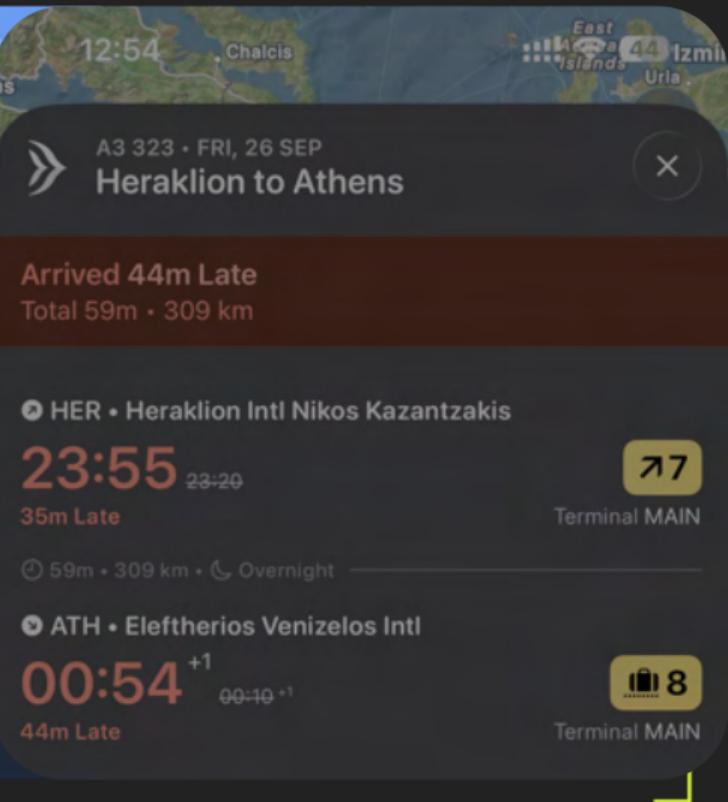
LLMs, Meet Your Tools: The Model Context Protocol

Model Context Protocol (MCP) enhances LLM capabilities by integrating them with external tools, APIs, and data sources within IDEs, fostering context-aware workflows. This talk explores MCP's benefits, integration, and custom capabilities, demonstrating its productivity and automation for developers, DevOps, and AI engineers. MCP is pivotal for modern developer experiences.

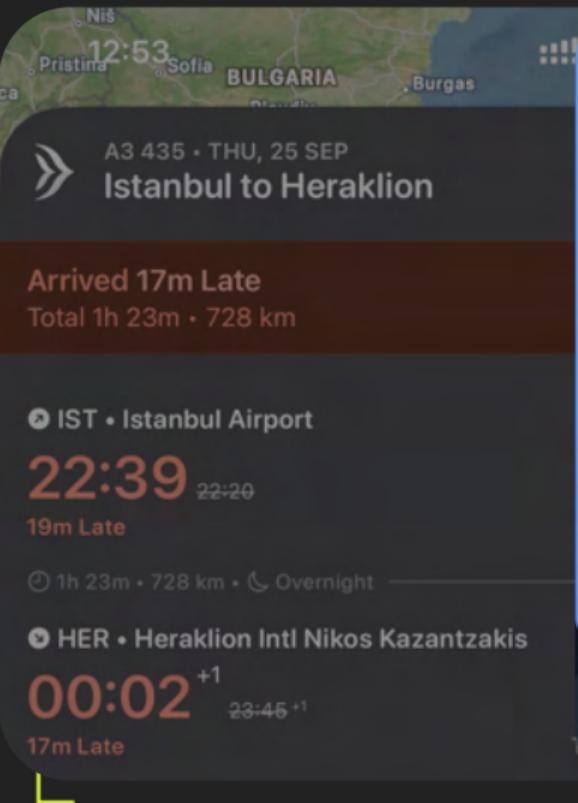
Alex Shershebnev
Zencoder

WHEN & WHERE
Friday, September 26, 12:20-13:00

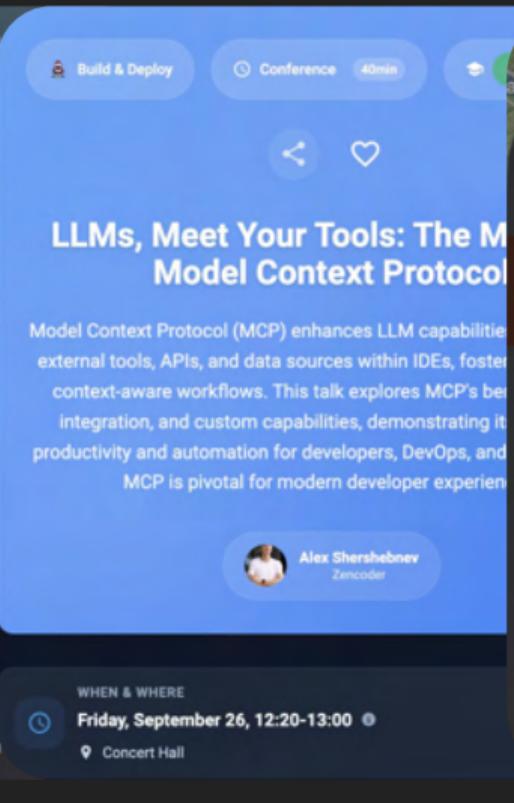
Concert Hall



What DevRel actually like

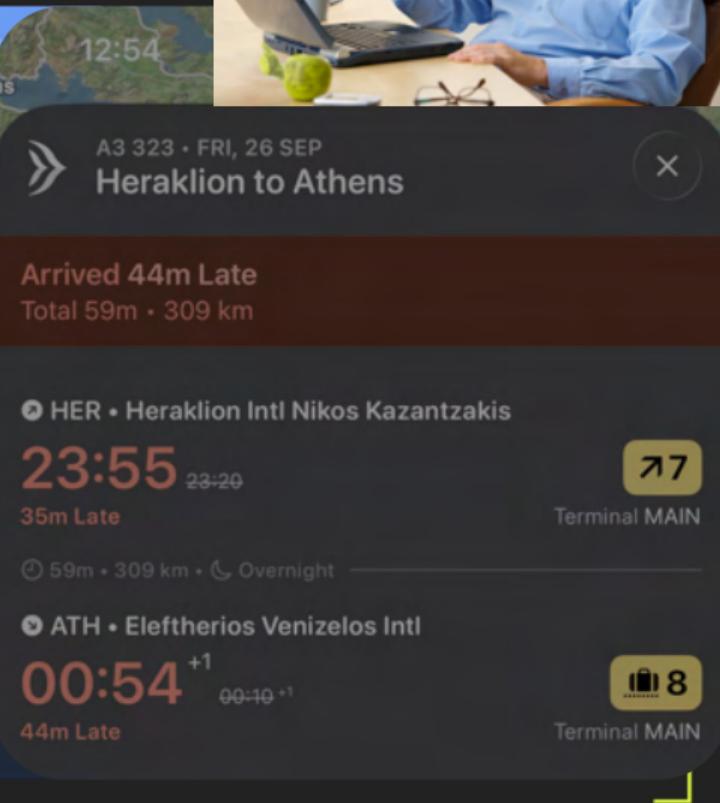


12:53
BULGARIA
A3 435 • THU, 25 SEP
Istanbul to Heraklion
Arrived 17m Late
Total 1h 23m • 728 km
• IST • Istanbul Airport
22:39 22:20
19m Late
1h 23m • 728 km • Overnight
• HER • Heraklion Intl Nikos Kazantzakis
00:02 +1 23:45 +1
17m Late



Build & Deploy Conference 40min

LLMs, Meet Your Tools: The Model Context Protocol
Model Context Protocol (MCP) enhances LLM capabilities by integrating them with external tools, APIs, and data sources within IDEs, fostering context-aware workflows. This talk explores MCP's benefits, integration, and custom capabilities, demonstrating its productivity and automation for developers, DevOps, and data scientists. MCP is pivotal for modern developer experiences.
Alex Shershelev Zencoder
WHEN & WHERE
Friday, September 26, 12:20-13:00
Concert Hall



12:54
A3 323 • FRI, 26 SEP
Heraklion to Athens
Arrived 44m Late
Total 59m • 309 km
• HER • Heraklion Intl Nikos Kazantzakis
23:55 23:20
35m Late
Terminal MAIN
• ATH • Eleftherios Venizelos Intl
00:54 +1 00:40 +1
44m Late
Terminal MAIN



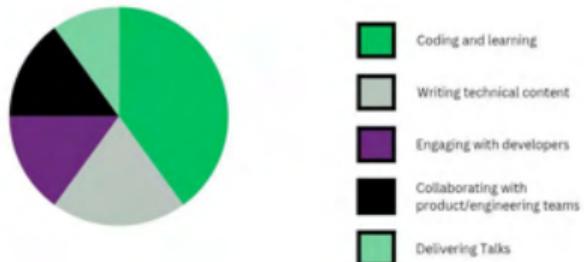
What DevRel actually like



What People Think DevRel Looks Like



What DevRel Actually looks like



Should you try too?



Yes

Though maybe not 40 talks in a year



But I don't have a topic



★ My top 3 recommendations for clarity + memorability:

1. "So You Think You Have Nothing to Talk About?" – conversational, instantly relevant.
2. "It's Obvious to You — and That's Why You Should Talk About It" – direct link to your main thesis.
3. "From Code to Conferences: Finding Your Voice in DevRel" – nicely ties your personal journey and DevRel theme.

Would you like me to craft a 5-minute outline for one of these (e.g., "So You Think You Have Nothing to Talk About?") — with an intro hook, main point structure, and a strong closing line? That would make it super quick to rehearse and deliver.



How about "40 talks in a year, but why?"

That's actually **really good** — it has clarity *and* intrigue. Here's why it works and a few thoughts on how to fine-tune it depending on the tone you want:



DON'T TELL ME
I'M ABSOLUTELY RIGHT

ChatGPT 5 >

★ My top 3 recommendations for clarity + memorability:

1. "So You Think You Have Nothing to Talk About?" – conversational, instantiates a point of view
2. "It's Obvious to You — and That's Why You Should Talk About It" – direct, assertive, emphasizes a point of view
3. "From Code to Conferences: Finding Your Voice in DevRel" – nicely ties your point of view to a broader context

Would you like me to craft a 5-minute outline for one of these (e.g., "So You Think You Have Nothing to Talk About?")? I can include a clear point structure, and a strong closing line? That would make it super quick to reference.



That's actually **really good** — it has clarity *and* intrigue. Here's why it works and what:



Python Summit Switzerland'25

Claude

OK, YOU'RE ABSOLUTELY
RIGHT

Everyone Thinks It's Obvious (It's Not)



The Developer's Blind Spot: Thinking It's Obvious

Everyone Thinks It's Obvious (It's Not)



The Developer's Blind Spot: Thinking It's Obvious

Everyone Thinks It's Obvious (It's Not)

What You Know Is Worth Sharing



The Developer's Blind Spot: Thinking It's Obvious

Everyone Thinks It's Obvious (It's Not)

What You Know Is Worth Sharing

Yes, You Have Something to Say



The Developer's Blind Spot: Thinking It's Obvious

Everyone Thinks It's Obvious (It's Not)

What You Know Is Worth Sharing

You Already Have a Talk in You

Yes, You Have Something to Say



The Developer's Blind Spot: Thinking It's Obvious

Everyone Thinks It's Obvious (It's Not)

Your Experience Is Your Superpower

What You Know Is Worth Sharing

You Already Have a Talk in You

Yes, You Have Something to Say



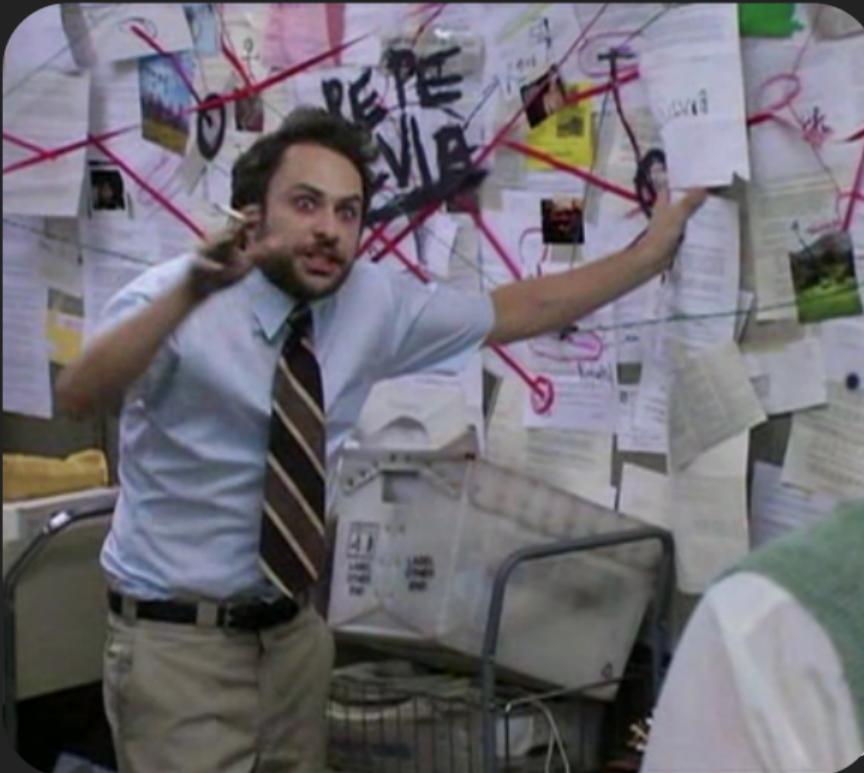
Bursting the bubble



Bursting the bubble



Talk about what you are passionate about



Don't get discouraged





Connect



Lightning Talk 9 of 9

Pavel Sulimov

A Wonderful Swiss Weekend with Apertus



A Wonderful Swiss Weekend with Apertus

17.10.2025

Pavel Sulimov

Today is Friday: any plans for the weekend?



Let's get advice from Apertus!



EPFL, ETH Zurich, and the Swiss National Supercomputing Centre (CSCS) has released Apertus, Switzerland's first large-scale open, multilingual language model — a milestone in generative AI for transparency and diversity. Trained on 15 trillion tokens across more than 1,000 languages – 40% of the data is non-English – Apertus includes many languages that have so far been underrepresented in LLMs, such as Swiss German, Romansh, and many others. Apertus serves as a building block for developers and organizations for future applications such as chatbots, translation systems, or educational tools.

Let's make a simple app

The screenshot shows the homepage of the SwissTripster app. At the top, there is a logo featuring a green mountain peak icon and the text "SwissTripster". Below it, a subtext reads "Your AI-powered Swiss travel assistant". A large white button labeled "Quick Start Examples" is centered. Below this button are four cards representing different trip types: "Mountain Hike" (Day trip from Zurich to Interlaken for hiking), "City Exploration" (Cultural day in Lausanne from Geneva), "Family Adventure" (Kid-friendly day in Lucerne from Basel), and "Romantic Getaway" (Wine country tour from Bern). At the bottom, there is a section titled "Plan Your Perfect Day Trip" with a placeholder text "Describe your ideal Swiss adventure in your own words". A text input field contains the text: "I'm staying in Geneva and have a free day tomorrow. I want to explore Lausanne's old town, visit a museum or two, enjoy lakeside dining, and experience some local culture. I need to be back by 8 PM." To the right of the input field are three small icons: a blue square with a white question mark, a red square with a white exclamation mark, and a green square with a white checkmark.

```
class ApertusService:
    def __init__(self):
        self.model_name = "swiss-ai/Apertus-8B-2509"
        self.pipeline = None
        self.model_loaded = False

    def load_model(self):
        """Load Apertus model without max_memory parameter"""
        try:
            logger.info(f"Loading Apertus model: {self.model_name}")

            self.pipeline = pipeline(
                "text-generation",
                model=self.model_name,
                torch_dtype=torch.float32,
                device_map="auto",
                trust_remote_code=True
            )
            self.model_loaded = True
            logger.info("Apertus model loaded successfully")
```

<https://huggingface.co/swiss-ai/Apertus-8B-2509> (deployed smaller model locally)

Something goes wrong immediately

◆ Travel to Destination

- 9:00 AM - Depart from Geneva to Lausanne by train, arriving at 10:30 AM.



◆ Main Activity

- 10:45 AM - 12:30 PM - Explore Lausanne's Old Town, starting at the Cathedral of Notre-Dame and walking along the Quai du Mont-Blanc.

And I can check it easily with SBB

◆ Travel to Destination

- 9:00 AM - Depart from Geneva to Lausanne by train, arriving at 10:30 AM.



◆ Main Activity

- 10:45 AM - 12:30 PM - Explore Lausanne's Old Town, starting at the Cathed



Let's help Apertus with info from SBB API

```
class SBBService:  
    def __init__(self):  
        pass  
  
    def get_connections(self, from_station, to_station, limit=3):  
        """Get train connections with proper time validation"""  
        try:  
            connections = pySBB.get_connections(from_station, to_station, limit=limit)  
  
            formatted_connections = []  
            for i, conn in enumerate(connections):  
                try:  
                    # Get raw connection info  
                    conn_str = str(conn)  
                    logger.info(f"Raw connection {i}: {conn_str}")  
  
                    # Parse the connection string for times  
                    info = self._parse_connection_string(conn_str)  
                except Exception as e:  
                    logger.error(f"Error parsing connection {i}: {e}")  
                    continue  
            return formatted_connections  
        except pySBB.exceptions.ConnectionError as e:  
            logger.error(f"Connection error: {e}")  
            return None
```

```
# Add SBB data if available  
if use_sbb_hint and sbb_data and "N/A" not in sbb_data:  
    prompt += f"\nUse these train times from the schedule:\n{sbb_data}\n"
```



Include real train schedules

And it gets better immediately



Your Personalized Itinerary



With real train schedules

◆ Travel to Destination

- 09:54 - Depart Genève for Lausanne



◆ Main Activity

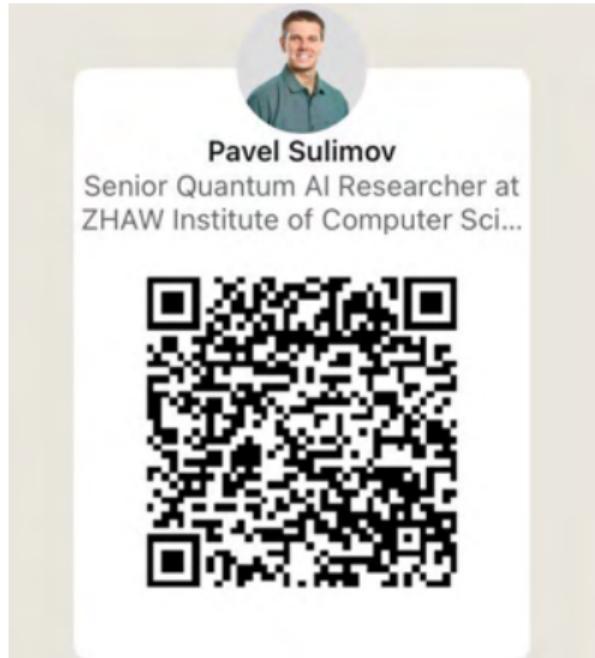
- 10:37 - 12:34 - Explore Lausanne's old town, visit a museum or two, enjoy lakeside dining, and experience some local culture.



<http://160.85.252.76:7860/>

(you can open, but better not generate anything, since I
do not have yet queueing)

Wait for more to come, I seem to like this joke project!



A profile card for Pavel Sulimov. It features a circular photo of a man with short brown hair, wearing a teal polo shirt. Below the photo, his name "Pavel Sulimov" is printed in a serif font. Underneath his name, it says "Senior Quantum AI Researcher at ZHAW Institute of Computer Sci...". At the bottom of the card is a large QR code.