The story of a little PhD student

Spirals summer seminar

Rémy Raes

01

Retrospective

Career

2019 2019-2022 2023

Teams

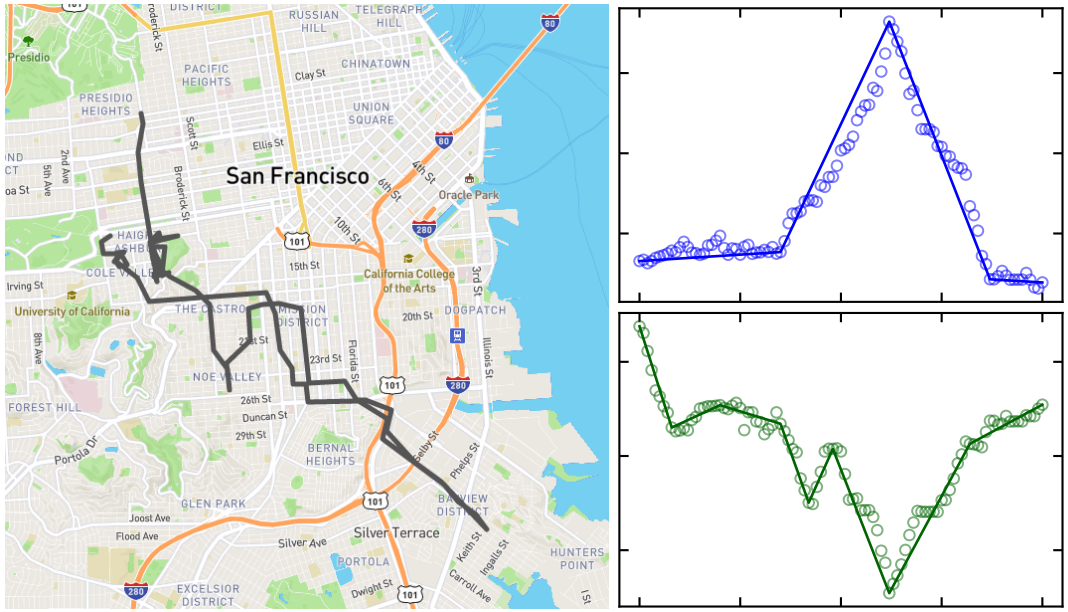
Topics

Inria

02

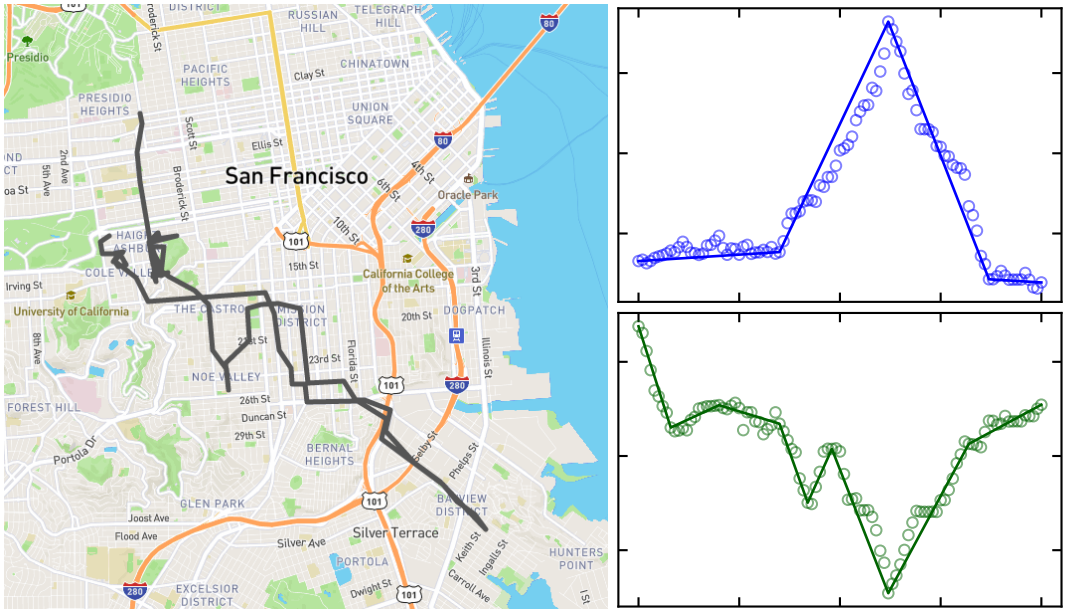
My current activities

FLAIR: a recap



- Model big amounts of data on phones
- Run attacks to evaluate the privacy

FLAIR: a recap



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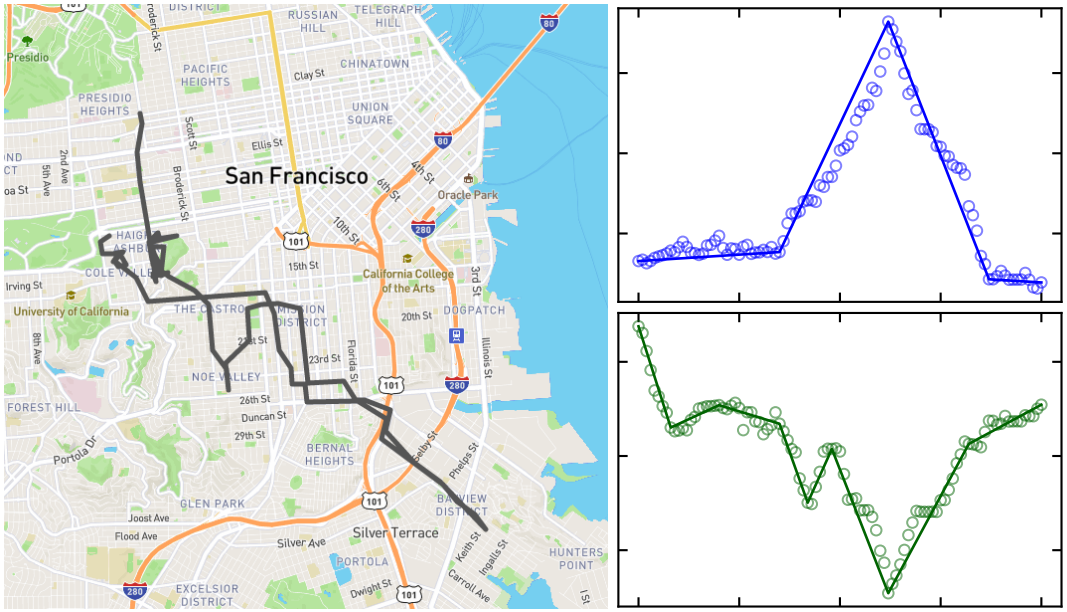

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FLAIR: a presentation

Inria

FLAIR: a few submissions

Aug. 1st, 2022	*VLDB: submission*
Sept. 16th, 2022	*VLDB: reject*
Oct. 20th, 2022	*EuroSys: submission*
Jan. 19th, 2023	*EuroSys: reject*
Mar. 1st, 2023	*JSys: submission*
Apr. 20th, 2023	*JSys: reject*
May 15th, 2023	*IMWUT: submission*
Jun. 2nd, 2023	*IMWUT: desk-reject*

Inria

FLAIR: improvements

- Rewrote paper for clarity
- Wrote an artefacts appendix (for *reproducibility*)
- Added epsilon study

Figure: CDF of latitude and longitude variations of successive locations in CABSPOTTING and PRIVAMOV.

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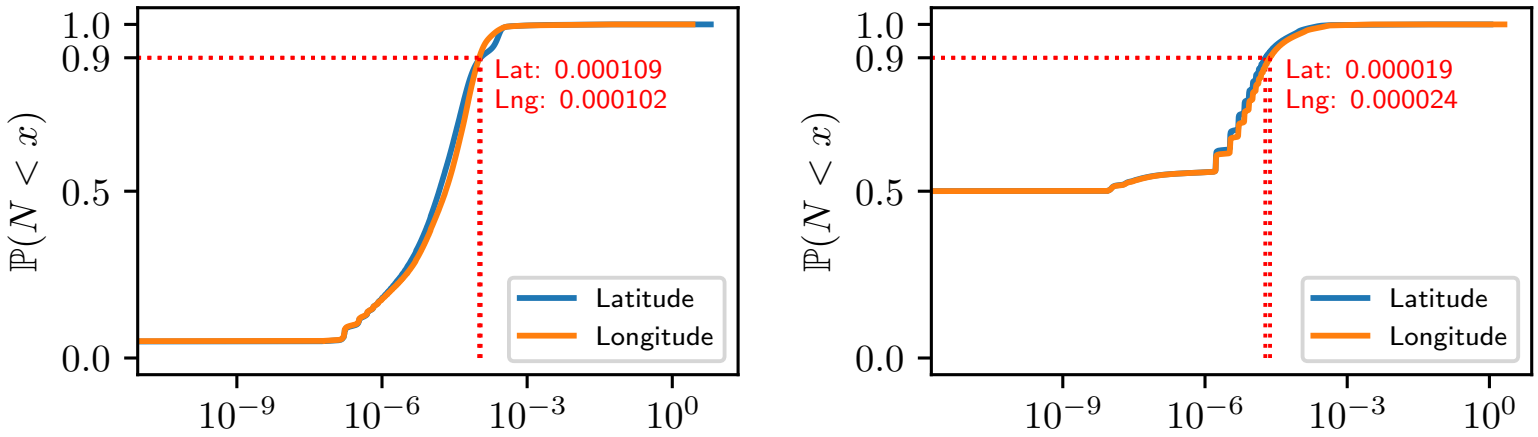

Figure: CDF of latitude and longitude variations of successive locations in CABSPOTTING and PRIVAMOV.

FLAIR: data compression

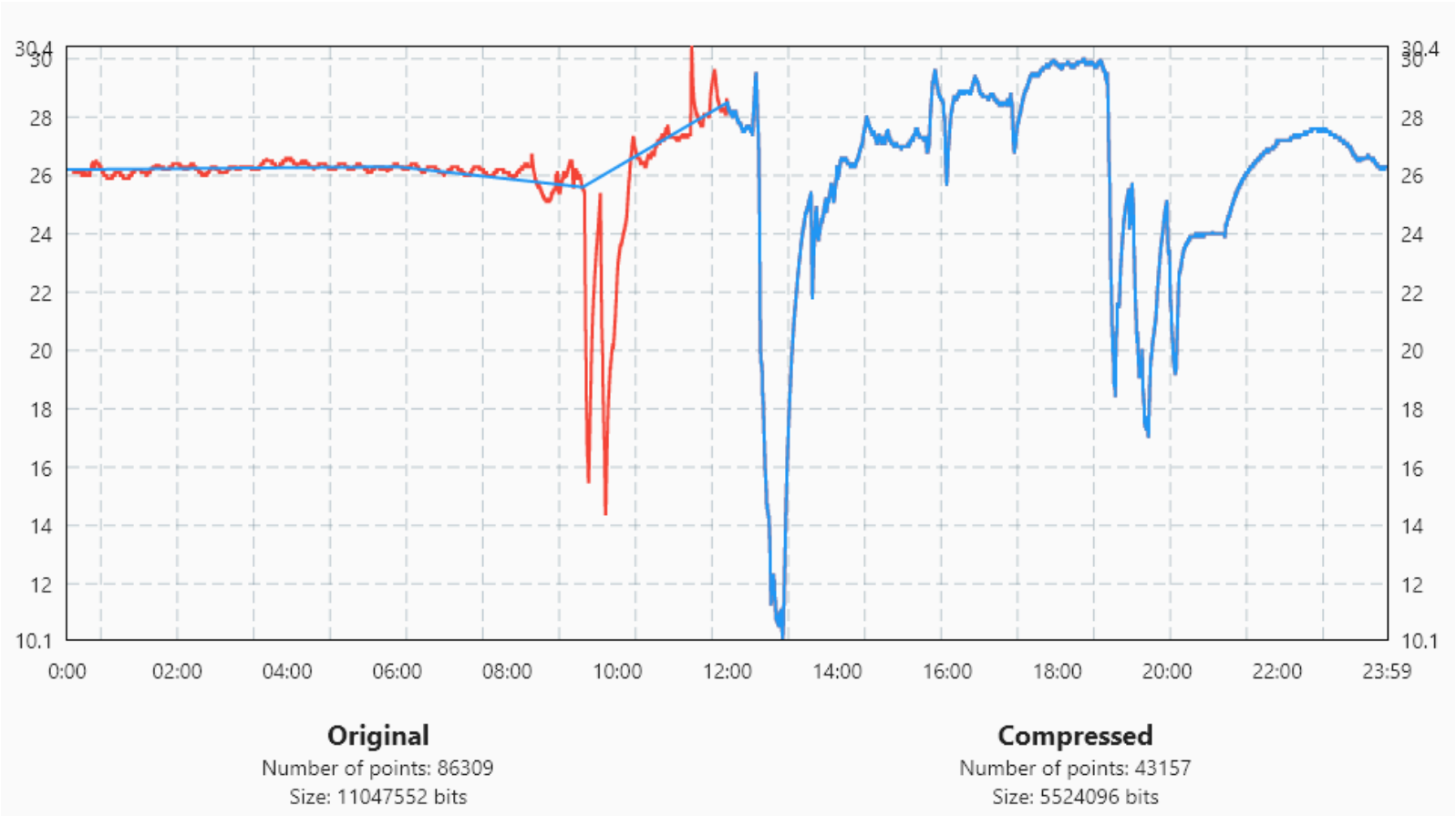

Figure: Screenshot of the Apolline temperature time series of April 4th, 2023 in Rennes (both uncompressed and half-compressed)

Apolline

- Air quality monitoring
- Portable sensors network

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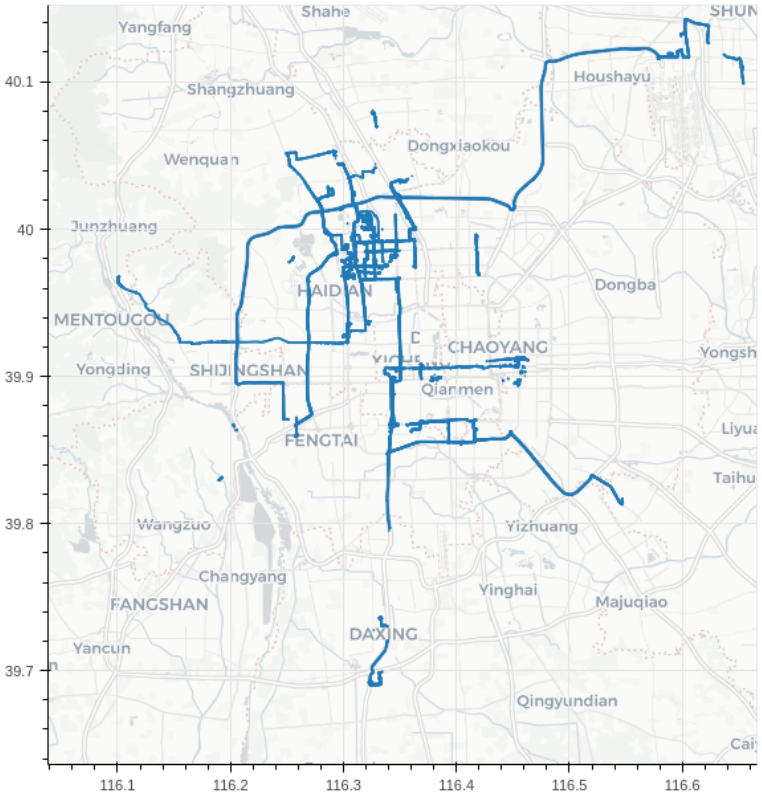
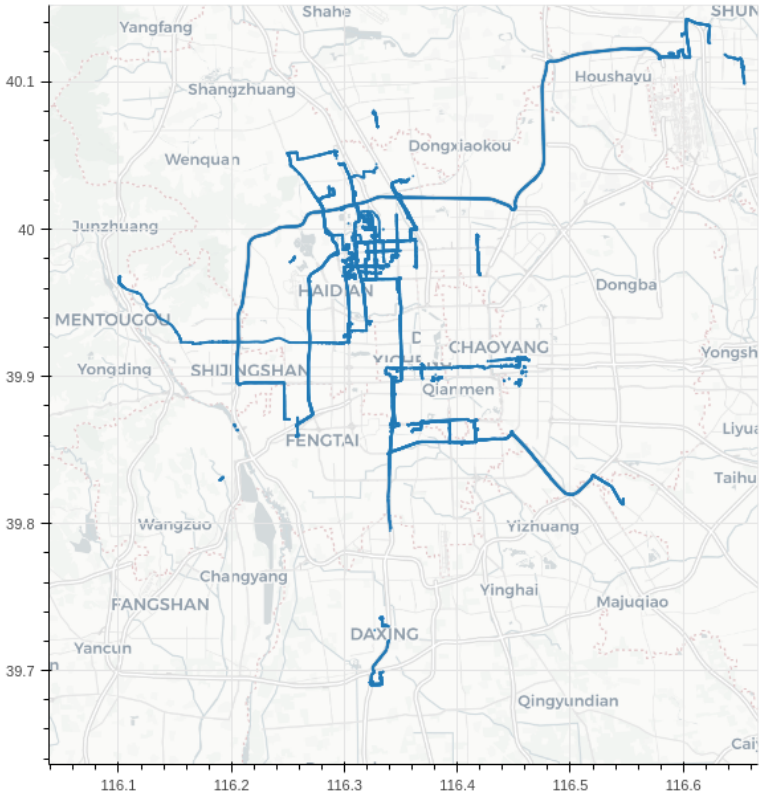
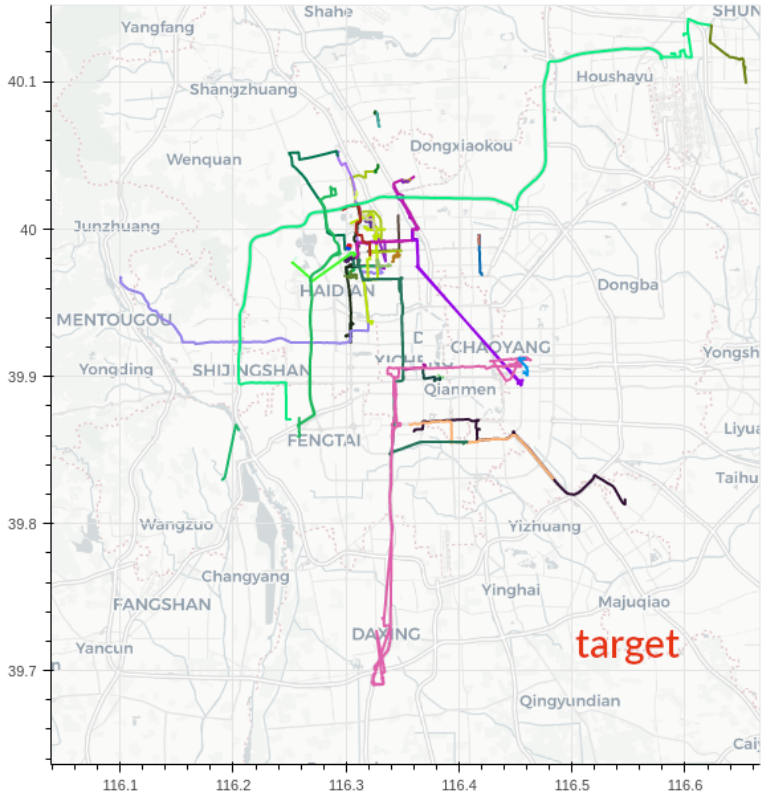
Paths reconstruction



- Cloud of points
- Build paths from it

Paths reconstruction





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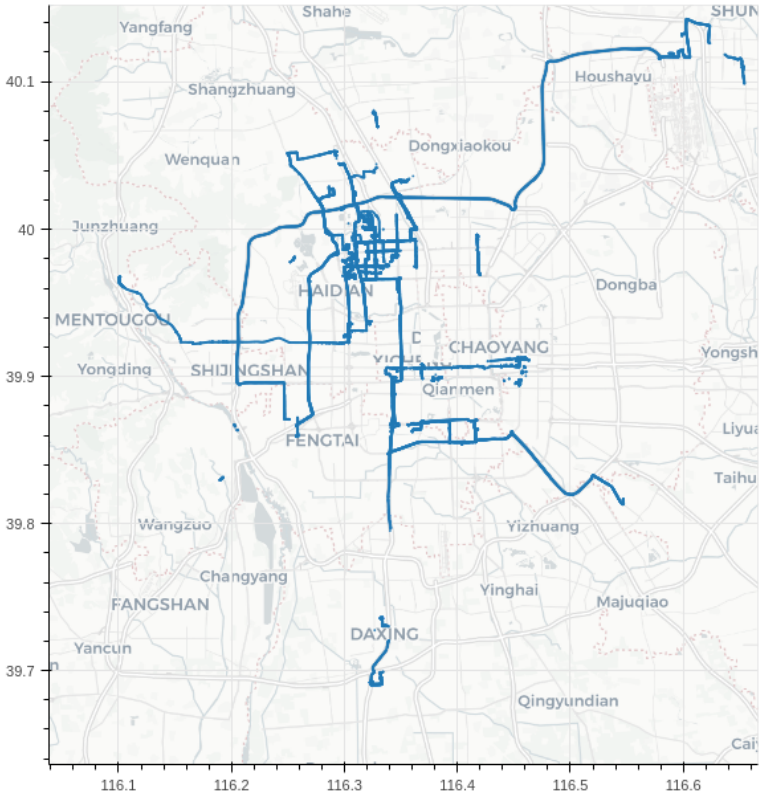

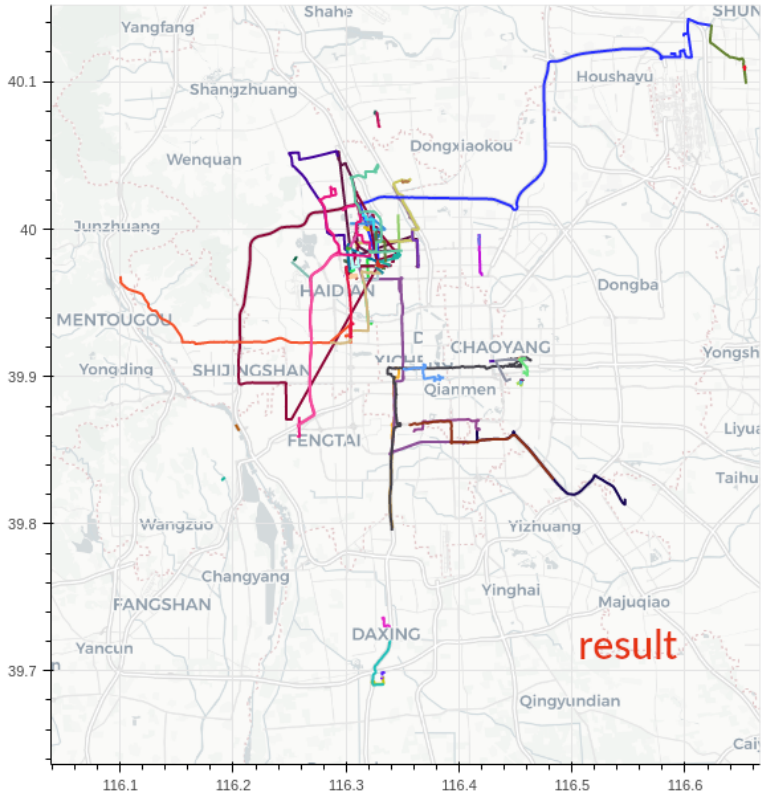

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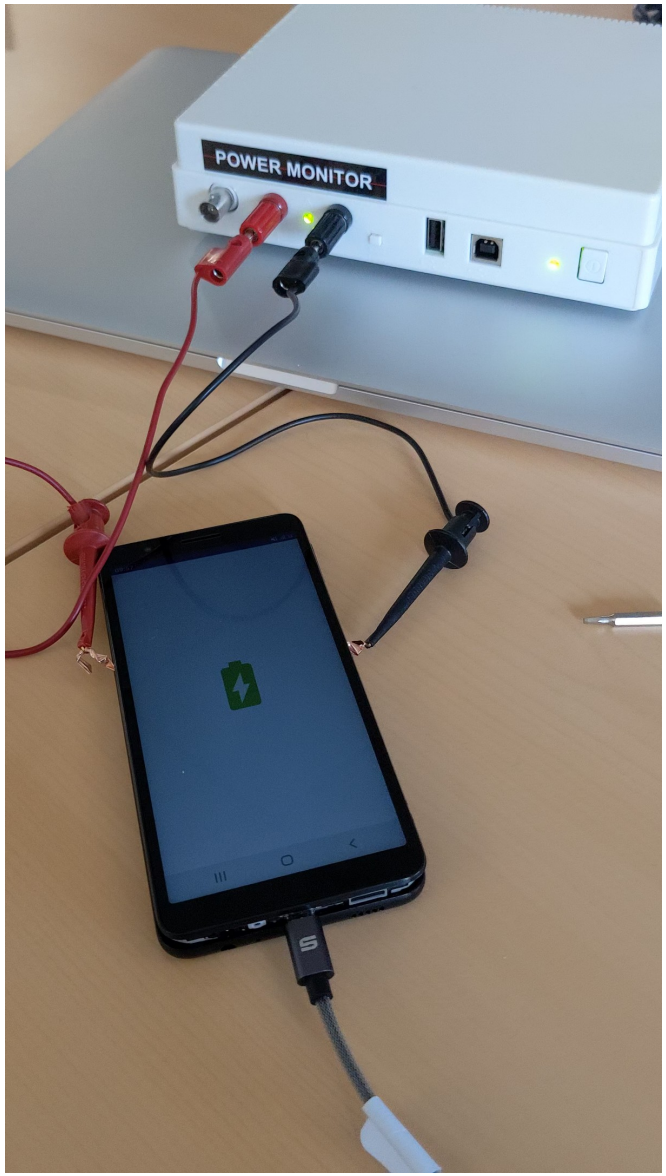
Android TPLs

- Compare libraries using various metrics
- Shift to *Android Go*
- In collaboration with Noé and Martin



Inria

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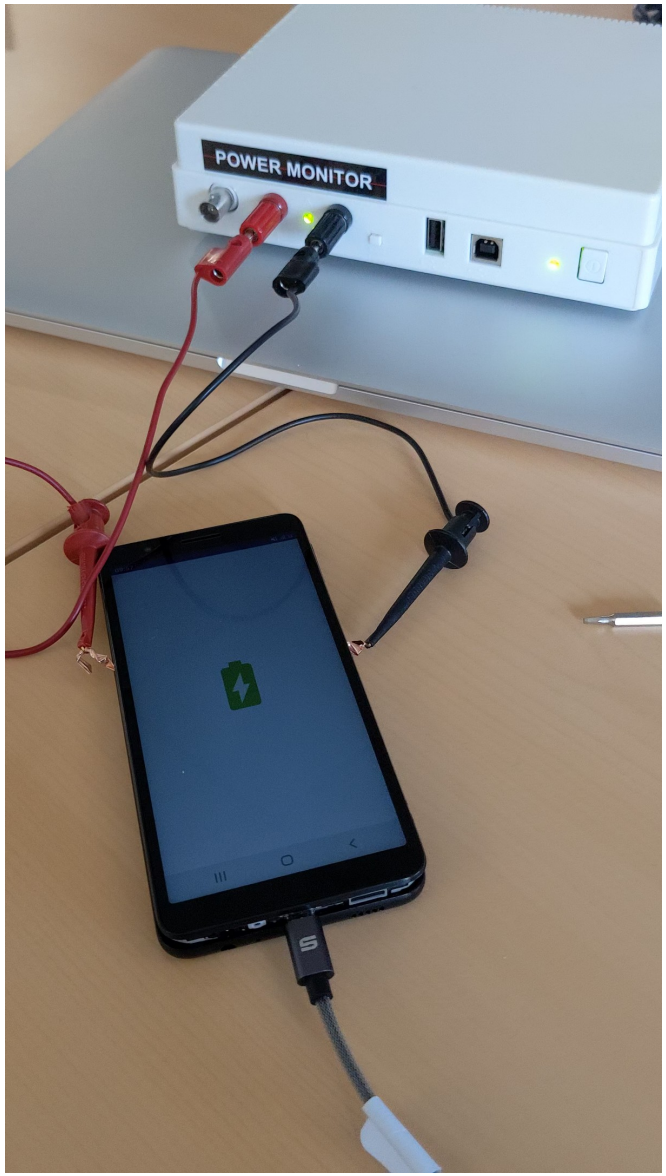

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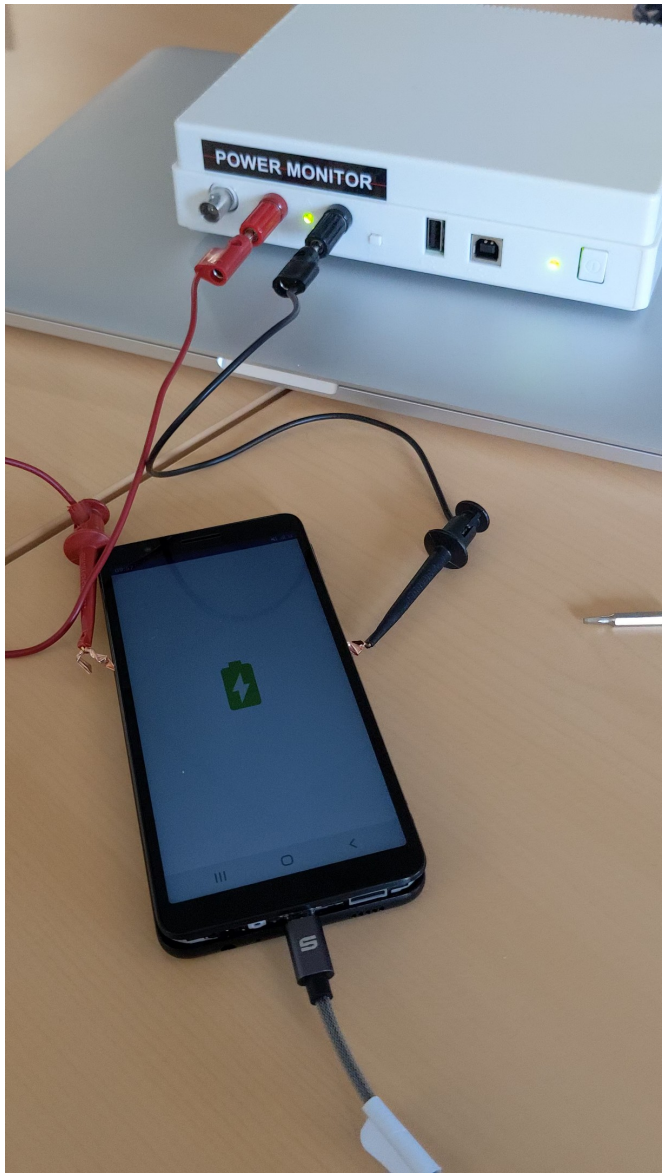

Inria

- Reviews
- Scientific mediation

Source: https://www.europe1.fr/sciences/les-jeunes-de-plus-en-plus-mefiants-envers-la-science-selon-un-sondage-ifop-4160660

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03

My future

Short-term

- Data compression
- Points cloud
- Continue the collaboration on libraries comparison
- CST?

Inria

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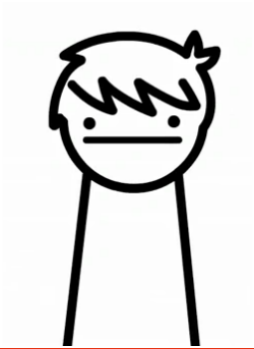
Career?

2019 2019-2022 2023 ???

Global direction/thematics?

Data compression
Data modelling
Energy consumption
Constrained environments
Privacy
Distributed systems
Smartphones
Federated learning
Location privacy (server+client-side)
Green IT
Indoor location
Device-to-device communication



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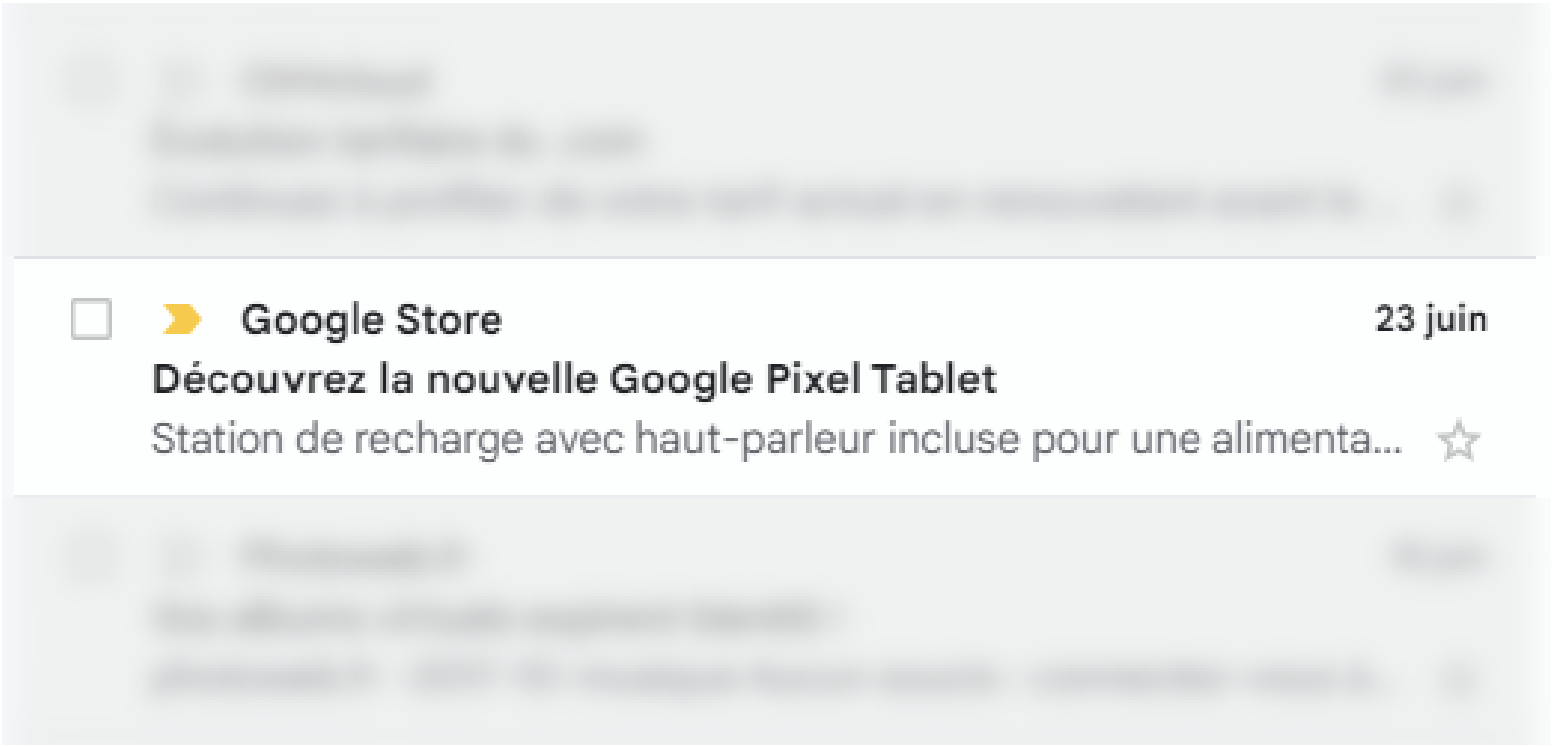

Figure: New Google products each year! Woohoo!

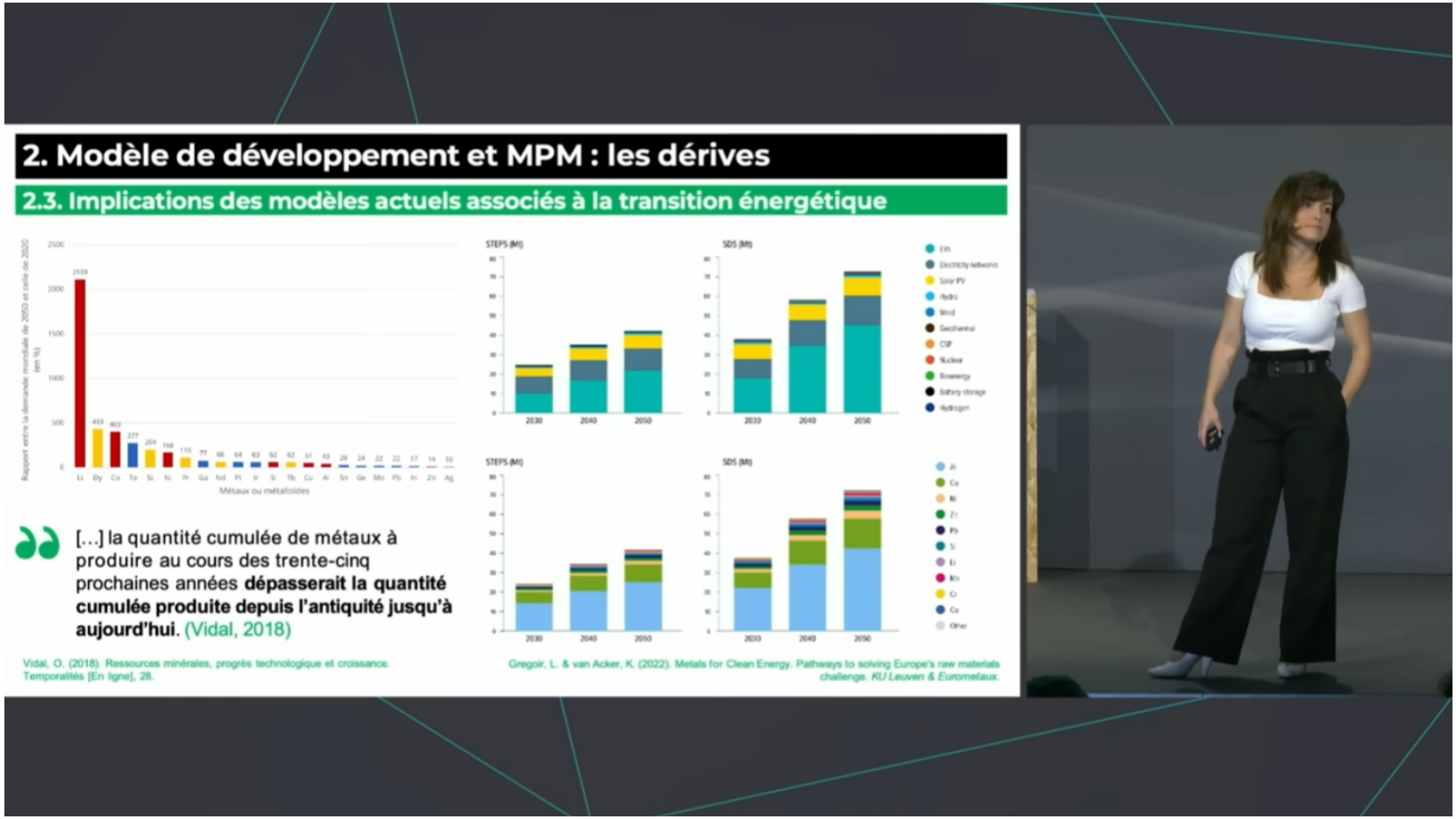

Figure: Ruée minière au XXIè siècle : jusqu'où les limites seront-elles repoussées ? (https://www.youtube.com/watch?v=i8RMX8ODWQs)

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