Social Network Analysis for Computer Scientists

Frank Takes

LIACS, Leiden University

https://liacs.leidenuniv.nl/~takesfw/SNACS

Week 13 — Code review

Where are we? . . .

- Now in 2nd course phase — the course project (60% of final grade)
  - Course project **paper** (including **programming** work)
  - Course project **presentation** (done!)
- Preliminary course project papers have been processed;
  a lot of good progress, and very nice project ideas.

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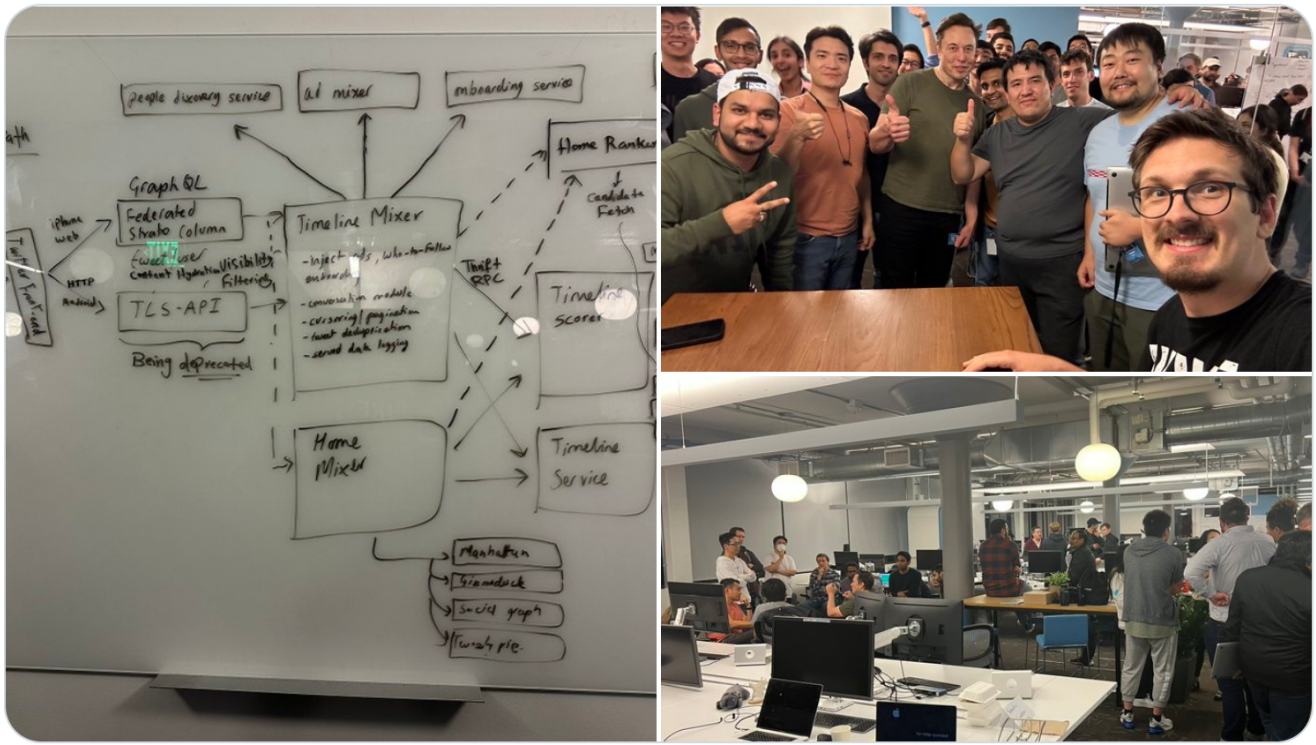
- Upcoming sessions and deadlines
  - **Dec 5 (today): code review session** and lab session
  - Dec 12 (next week): no lecture, last lab session
  - Dec 14 (AoE): course project deadline (submit via Brightspace)
    No submission or late? Retake deadline is Jan 31

← **Tweet**

Elon Musk ✓
@elonmusk

Just leaving Twitter HQ code review

Tweet vertalen



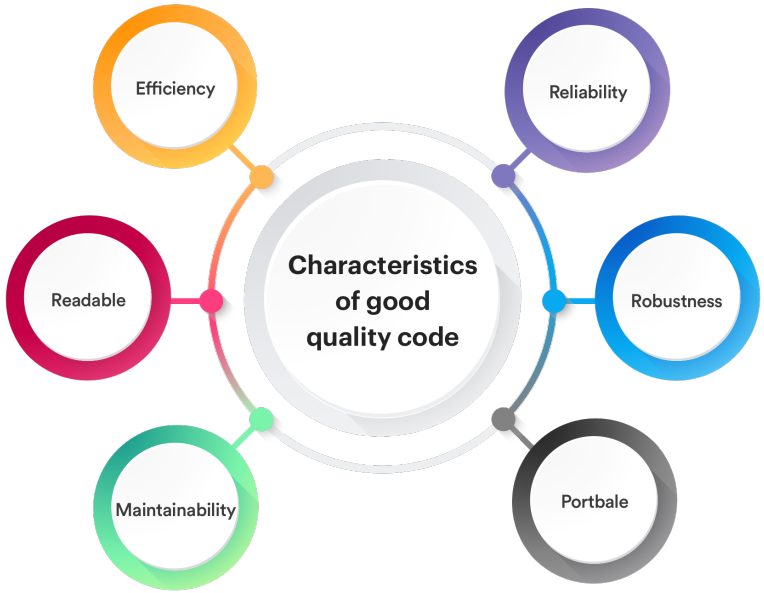
10:28 a.m. · 19 nov. 2022 · Twitter for iPhone

Code review

- **Peer review**: evaluation of work by one or more individuals with similar competence
- **Code review**: peer review of programming code
- "Pair programming"
- Four eyes see more than two
- Go beyond your current knowledge and skills

Possible code evaluation criteria

- Correctness guarantees, time and memory constraints
- Are input and output data validated for consistency?
- Is there a pipeline? is output suitable for tables or diagrams?
- Is the code readable, reusable and sufficiently modular?



About the data and experiments

- Is the data relevant and sufficient?
- Is the data "diverse" in relevant dimensions?
- What do you measure in each experiment?
  Quality, running time, error?
- Why is this data good for these experiments?
- Is the data possibly biased, and how may this affect the results?

Today

- Explain your project programming work to the other team
- Mention what you have done and not yet done
- Introduce the other team to your code
- Read, understand, evaluate, ask questions, ...
- Explain to the other team positive and less positive, yet constructive points about their work
- Together, **derive useful "best practices" and add them to the collaborative document**
- Reorganize the document where needed

Collaborative learning — Today

1. 9:15 Do the code review (here, computer rooms, or seminar rooms)
2. 10:10 Contribute to collaborative document with best practices: `is.gd/snacs2025codereview` (return to BM 1.33)
3. 10:20 Jointly arrive at a set of best practices for the entire class
4. 10:40 Complete the course questionnaire (BM 1.33)

Please be constructive. Good luck!

1	&	**2**	=	Anomaly detection (B)	&	Anomaly detection (C)
3	&	**4**	=	Anomaly detection (C)	&	Anomaly detection (A)
5	&	**8**	=	Anonymity in networks (B)	&	Anonymity in networks (A)
6	&	**7**	=	Anonymity in networks (C)	&	Anonymity in networks (A)
9	&	**11**	=	Centrality estimation (B)	&	Centrality estimation (C)
10	&	**12**	=	Centrality estimation (A)	&	Centrality estimation (B)
13	&	**15**	=	Community detection (C)	&	Community detection (A)
14	&	**16**	=	Community detection (B)	&	Community detection (A)
17	&	**18**	=	Core/periphery structure (A)	&	Core/periphery structure (B)
19	&	**20**	=	Core/periphery structure (C)	&	Core/periphery structure (A)
21	&	**22**	=	Graph compression (A)	&	Graph compression (C)
23	&	**41**	=	Graph compression (B)	&	Sampling from networks (A)
25	&	**26**	=	Influence spread and virality (B)	&	Influence spread and virality (C)
27	&	**28**	=	Influence spread and virality ©	&	Influence spread and virality (A)
29	&	**32**	=	Link prediction (A)	&	Link prediction (C)
30	&	**31**	=	Link prediction (B)	&	Link prediction (C)
33	&	**34**	=	Network motifs (A)	&	Network motifs (B)
35	&	**36**	=	Network motifs (C)	&	Network motifs (B)
37	&	**40**	=	Network embeddings (B)	&	Network embeddings (C)
38	&	**39**	=	Network embeddings (A)	&	Network embeddings (C)
42	&	**43A**	=	Sampling from networks (B)	&	Sampling from networks (A)
43	&	**44**	=	Sampling from networks (C)	&	Sampling from networks (A)
45	&	**47**	=	Shortest paths (C)	&	Shortest paths (B)
46	&	**48**	=	Shortest paths (B)	&	Shortest paths (A)
49	&	**52**	=	Visualization algorithms (A)	&	Visualization algorithms (C)
50	&	**51**	=	Visualization algorithms (B)	&	Visualization algorithms (C)