

BMM-24

Project review

Next meetings

- 10.12 - Final project discussion
- 17.12 - Final classes, discuss gradient flows, last talks

Final project discussion: what should be covered

1. Answer to review(s), including Oleg's review, cross-review, review of V. V. Strojov
2. Blog post must be ready to submit on <https://towardsdatascience.com/> or medium.com
 - a. The resource to publish is discussable
3. Let's discuss plans for the libraries

Libraries: what's next

1. The simplest way: **do nothing**
2. Github provides a way to “publish” your libraries (at least get doi):
 - a. Pros: you get a doi, so potentially it would be easy to cite your code
 - b. Pros: we haven't tried yet, but it should be very easy to publish it
 - c. Cons: it will take some time (1-2 hours?)
 - d. Cons: nobody did it yet in our department
 - e. Cons: not sure, but it looks like you need to archive this repository
 - f. If you want to publish, please write me
 - g. <https://docs.github.com/ru/repositories/archiving-a-github-repository/referencing-and-citing-content>

Libraries: what's next

3. There are some journals that accept very short articles (2-3 pages) describing your software
 - a. Pros: Q3 paper with minimal amount of text
 - b. Cons: it will take more time than just publishing github DOI
 - i. It would suggest this for Relaxit and IRT*
 - c. Cons: this workflow is very risky, nobody did this in our department yet (Or Maybe Anton Khritankov)
 - d. If you want to try, I can help and find more suitable journal
 - e. Example: <https://www.sciencedirect.com/science/article/pii/S2665963821000476>

Libraries: what's next

4. For LLM and MDL projects:
 - a. It would be good to deploy the working prototype at hugging face spaces
5. For MDL project:
 - a. Since the project is quite interesting from the research side, I'd suggest make a blog-post or even a short paper
6. For Relaxit and BDC: Very risky: make a long-read (?) academical paper (?) with V.V. Strijov

Review: IRT, major points

- Von Mises and Mixture model: work incorrectly
- Think about re-publishing blog-post on [towardsdatascience](#)

Review: Relaxit, major points

- REINFORCE: not implemented actually
- Let's replace it with vanilla ST-estimator
- Laplace bridge: implemented in demo only

Review: MDL, major points

- The code structure is not clear, lack of tests, demo, comments, code duplicates

Review: ELBO with optimization operators

- The algorithms are not working, lack of tests, demo, comments, code
- Blog-post: when?

Review: Bayesian deep compression

- Third algorithm by Nikita?
- Renyi divergence - not sure that it's correct
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Review: LLM for graphical models

- Let's add adaptor for open-source models