Write your name here: Óttar Guðmundsson

NOTE: This review is supposed to be a review of the Research Plan. However, you turned in the project proposal and last week's presentation. Thus, I will review this simply as your research plan.

Project:

ML-based Distance Estimation Using Wi-Fi RSSI Measurements

Review question: 1. Is the document too long/short?

It's medium length, but could have been a little longer

Review question: 2. Does the document have a name in the format: "author1_author2-Task_1- Research _Plan-YYYYMMDD"

No, the naming is simply called plan-1

Review question: 3. Is there a date in the running header at the top of their report?

Yes there is

Project Title:

Review question: 4. Does the project title reflect the content of the research plan and investigation?

In a way. The distance estimation using signal strength and RSSI indicates what they are going to do, but there is no info on how they will measure it or what type of ML algorithm they are going to use.

Authors

Review question: 5. Is it clear who the authors?

Yes it is

Review question: 6. Is there an e-mail address for each of the authors?

Yes

Aims, Objectives, Goals, Research questions, hypotheses

Review question: 7. Are the aims, Objectives, goals, research questions, if present hypothesis of the research project appropriate? If not, how can they be improved?

Only the goals are present, and it can be improved by saying how many models at least the plan on having. There is no research question or hypothesis present so it is a little complicated to know what the aim of the research is.

Background and rationale

Review question: 8. Does the background lead to what is going to be investigated?

Yes it does

Review question: 9. Is the necessary background knowledge presented? Would this knowledge provide sufficient background for you to carry out the project?

No, it is not. It might add some more information about what algorithm they are going to use since the research they refer to only points at statistics and neural network.

Review question: 10. Is something missing?

Information about why this ML algorithm is picked for this project.

Theory/literature

Review question: 11. Is there a clear theoretical framework or prior research that this research plan builds upon?

No it is not. This part is missing from the document and the slides.

Review question: 12. Should something be added or deleted?

All of it. There is no theory presented that further supports the research

Research methodology

Review question: 13. Has the group described what research method (or methods) will be used?

Not in detail. They briefly name that they are going to use two cases, one where they collect real data from low interference area and another one that has a lot of interference but is simulated.

Review question: 14. Has the group argued why this is or these are the most appropriate method or methods?

There is nothing that points to that this is the best method, since no former theory is introduced. I still emphasize on the urge for information about what ML algorithm is going to be used and something that supports the use of it.

Review question: 15. Should the group use another method? If so, why is this other method more suitable?

I would like to see other researches that might use another method than the RSSI

Review question: 16. Is something missing?

All of it.

Participants, Procedures, Data collection and analysis

Review question: 17. If the research requires participants (research subjects, persons to be interviewed, survey participants, …), does the research plan justify the number of participants that are necessary? Have the research plan described how ethical issues will be addressed.

Not really, it would however require different devices for more data.

Review question: 18. Does the research plan adequately describe how the research will be conducted and how & what data is to be collected? Is this data sufficient? Is any of this data unnecessary (i.e. there is no justification for collecting this data)?

Yes, part of it will come from real data and other will be simulated. However, I feel like they should stick to either having real or simulated data for true comparison.

What would even be better is to collect data for both tasks in both simulated and real environment to see if there are any biases related to the data collection.

What type of simulation is going to be used? Where will this simulation run? How will the simulation add noise/interference to the environment?

Review question: 19. It software, hardware, or existing data data is necessary is it adequately described (i.e., sufficiently so that you could repeat the data collection and analysis)?

No information is given on what software or hardware they plan on using. There is no information about what kind of data will be collected or through what type of input it will be collected.

Review question: 20. Does the research plan adequately describe what analysis is to be done using the collected data?

No

Expected outcome(s)

Review question: 21. Does the research plan adequately describe the expected outcomes?

No. It is said that the models and data will be evaluated but with or against what is never mentioned.

Review question: 22. Are the data collection and analysis likely to yield these outcomes?

No idea as there is no definition on what outcome they will have based on the data collected.

Milestones/schedule, budget

Review question: 23. Is the milestone chart well presented?

I get the idea but it could have improvements.

Review question: 24. Are the milestones sufficiently detailed?

No. There is no indication on what enough data is, what does it mean that a model is finished, what different features are going to be used.

Review question: 25. Are they too detailed?

No, they need more information.

Review question: 26. What additional milestones might be needed?

Creation of the slideshow and installation of environments, such as the simulation.

Review question: 27. What milestones might be removed

None

Review question: 28. Is the time plan viable?

Not sure about this one, hard to estimate the data collection part. How much code is needed to write the simulation?

Review question: 29. If there is a budget, is it adequate to carry out the proposed research?

No budget mentioned

Risks

Review question: 30. Does the research plan describe any risks? If so, are they graded as to the degree of risk? Are there plans for how

the research plan should be revised if any of these risks occurs?

No risks are included

Outline

Review question: 31. Is there an outline for the planned research report? If so, is it suitable?

No outline used

References

Review question: 32. Are the references suitable?

No. Could have used Zotero style and they are only using one reference.

Review question: 33. Are there any references that are obviously missing?

Yes. The problem statement obviously needs 2 or 3 references since there is no way of knowing why these claims should hold. For example, why is the MEC technology used to provide service?

Review question: 34. Are they authoritative?

They seem to know what they are talking about but are having hard time proving it for a first time reader.

Review question: 35. Can you find each of them?

Probably with an email, yes.

Review question: 36. Are the references recent or are they all quite out of date?

Yes. Only one reference is available and that is from 2007

Review question: 37. Are the references correctly formatted using a suitable format?

Yes, it seems like it is sufficient.

Appendix (Optional)

Review question: 38. Is the appendix necessary?

Not sure, maybe they might add some information about the simulation.

Review question: 39. Is something missing?

Yes, most parts of the research plan

Language –general quality

Review question: 40. Is the language used in the project plan acceptable?

It could definitely be improved, feel like parts of it are either written in rush or copied straight from the template.

Review question: 41. Are there problems with the text?

Yes. The purpose and the problem indicate the motivation for the research but the only way to take the results of this paper seriously is to be able to benchmark it somehow with other results so it can prove useful/beneficial for others.

Review question: 42. Are there parts of the plan that need to be clarified?

What ML algrotihm are you going to use? What simulation kit will be used? Why that simulation kit but not the others? Will there be a difference in the outcome based on different simulation? How will you completely measure the correct distance and what is the error margin?

Review question: 43. Is the structure of the plan satisfactory?

No

Writing

Review question: 44. Is the language clear? If not, is that because:
(a) the authors are reasoning in a way I am not used to?
(b) the authors are using words and expressions I do not understand?
(c) the text contains grammar or language mistakes which make it hard to follow?

Language is clear, but it needs 1 or 2 re reads.

Review question: 45. Is the writing coherent?
(a) Are pronouns used to connect sentences and reinforce meaning?
(b) Are logical connectors used?
(c) Are paragraphs structured with topic and supporting sentences?
(d) Are the subjects of sentences coherent with the topic of the paragraph?
(e) Do sentences follow the 'given-before-new' rule?

There are a few pronouns errors that need fixing. I feel like some of the sentences don't connected paragraphs and other sentences well.

Review question: 46. Is the writing concise?
(a) Are verbs used instead of nouns where possible?
(b) Are words that have little meaning used?

No, most sentences are pretty straight forward without babbling some nonsense just to lengthen the text.

Review question: 47. Are redundant expressions used?

No, not that I noticed.

Review question: 48. Is the writing correct?
(a) Are there grammatical mistakes?
(b) Are words used correctly?
(c) Is punctuation used correctly?

There are about 19 detected error, mostly related to usage of words. Syntax seems to be fine.

Review question: 49. What kind of reader have the writers written for?

The average ones, other students like us.

Review question: 50. Is the tone of the text: formal, academic, informal, or personal? If so, which.

The tone is formal and leans to informal and more interest in the field.

Other

Review question: 51. Is the scope of the investigation suitable?

It can not be answered at the moment. A thorough research question is needed to answer that.

Review question: 52. Is there a reasonable expectation that it can be completed during the course?

No idea as it is hard to tell how complex the algorithm used will be.

Review question: 53. Is the investigation too broad or too narrow?

I think it is just about right, if they can adjust their research question to answer their specific question.

Review question: 54. Do you have any other comments or suggestions that will help this other group improve their plan?

Yes. Please focus on informing readers or reviewers about the tools that you plan on using and why you are using them. There is no way to know what a simulation is in this case or how you plan on leveraging the pick of your simulation against other simulators.

Review question: 55. What were the strengths and weaknesses of the written project plan?

They seem to have an idea on how they will split the work evenly up and that they both trust each other to meet the milestones needed.

Oral presentation

Review question: 56. Did the oral presentation match the written research plan? If not, how did it differ?

No, since there was no research plan involved. There as also a talk about sustainability and ethics which was last weeks topic.

Review question: 57. What were the strengths and weaknesses of the oral presentation?

The strength was it was simple

The weak points are that they could have either paused or re recorded a lot of stutters or wrong words/phrases used. I know most programmers aren't designers in any way, but the slides could have been more presentable with justified texts, bolded keywords, pictures etc. Sell the idea with good presentation.

Overall

Review question: 58. If you were told that this was to be the plan for your own research, would you be happy or not? Why?

No, I feel that there are a lot of missing steps in the plan and the risk of evaluating what a good result is, is quite vague.