Example Reviews and Feedback

Example Review from Student #1

Short Summary

The research presented in the paper examines how emotions of developers can be detected with the minimal set of non-invasive sensors in order to be able to act in a timely fashion to their emotions. Emotions such as frustration and anger can introduce bugs and problems in code and thus being able to immediately respond to those emotions, is much more valuable than post-hoc.

Strengths & Weaknesses

Strengths:
- The introduction/motivation manages to show the relevance.
- Gives definition & background on emotions & cognition, and creates a working defintion for this study
- feasibility
- shows how their approach differs, how they are extending on previous work -> novel approach

Weaknesses:
- structure: some content which seems to fit better in the motivation or RQ, is in the related work (line 114-130 and 170-176)
- no storyline
- missing methodology/study procedure
- Related work could have been more structured and extended.

Detailed Comments for Authors

The paper present an approach to find the minimal set of non-invasive sensors to detect developer emotion in order to act on them immediately. Previous approach has limited the analysis to machine learning methods such as NBC and Logistic Regression, but the authors of these paper propose to use more diverse and better performing algorithms. The authors highlight some previous work which also shows the feasibility of the study, showing that previous paper have gotten up to 70% accuracy.

However, there is no methodology, only a proposal so it is a bit hard to see how they would want to find the minimal set of invasive sensors and what they proposed study procedure really is. Is it going to be a controlled lab study? And in-between subject study? My major concerns for the paper are that there is no general storyline the paper follows. The paper could have used a storyline to show why it is important to find the minimal set of non-invasive sensor or used it to motivate the reader further. The paper seems to have two main research questions (A) what is the minimal set of non-invasive sensors to detect emotions accurately and (B) proposing a better predicting machine learning model for the proposed field of study. Thus the related work could have been split into research on the two topics,

whereas currently there seems to no real structure or storyline in the related work, and a lack of sources of what has been done in this specific area. Have there been any studies previously in other fields who tried to find the minimal set of sensors? Or suggest the best combination of sensors or even compared those? (I believe we read a paper where they actually did a comparison, perhaps there is even more). The authors also state that their method is better, but include no references, so it sounds more of an assumption. (Line 124) What are usual problems of post-hoc measures? Are there any studies which actually analyse this and could be used as basis for this study? Generally that some paragraphs would have better fit into another section (e.g. paragraphs in related work (line 114-130 and 170-176) sound more like motivation or research question)Overall, I am in favor of a weak accept due to the fact that the paper suggests a novel approach and wants to propose a more efficient, accurate and feasible approach to sensing developers and the structuring flaws can be easily adjusted or are of a minor concern. However, I would suggested a slight overworking of the paper to bring it into a better structure and incorporate a storyline for the presentation (e.g. many studies have started to use sensing and proposed several solutions based on this sensing, however, evidently this are very intrusive or unnatural to used due ..... and .... intrusion such as this can have the effects ..... and ... and thus it is crucial to analyse the minimal set of sensors since otherwise..... it is not natural/feasible)

Seminar Assistant's Feedback for Review #1

Grade: 6.0
- --Very short summary, missing e.g. the deep learning aspect, and it seems to focus mostly on the structure of the paper. Try to write a summary that you can read to anyone who didn't read the proposal (and does not have the PDF) to explain briefly what it is about, so problem, what the authors want to do (solution), how they want to do it (methodology). Imagine telling another person that did not read the proposal what it is about.

- Good point on missing methodology/study procedure
- Good points on very rough and short related work
- ++Detailed comments add on incomplete summary above
- ++Very good constructive feedback for improving paper structure / adding a storyline

Example Review from Student #2

Short Summary

The proposed research paper wants to shine a light on the communication issues that domain experts face when collaborating with data scientists. The authors state that most of the research has focused on the software developers / data scientists, but hasn't considered the perspective of the domain expert in a more thorough manner. They want to close this research gap with the paper by identifying communication gaps, how they are currently overcome and how an ideal communication tool for domain experts should look like.

Strengths & Weaknesses

Strengths:
- reasoning on why it's a novel research question & what the benefits are of studying it
- structure of the paper
- already stating potential pitfalls and limitations of the study and how to handle them
- substantial amount of references

Weaknesses:
- the related work section is sometimes a bit superficial (see detailed comment below)
- explaining technical terms (see detailed comment below)
- the assumption that an ideal communication tool can exist (see detailed comment below)

Detailed Comments for Authors

The scope of the paper would only focus on the domain expert which is very narrow, especially when studying communication and coordination issues, which (as you've stated in the paper) is bi-directional. However, I think this is fine, as there already exists a good amount of research examining the issue from the perspective of the developer and you are closing the gap by examining the issue from the perspective of the domain expert. It probably isn't as beneficial as previous research on the perspective of the developer has been, but because communication is bi-directional, studying the domain expert's perspective will lead to beneficial insights for both parties.

The related work section on issue trackers contains statements like „[…] suggested four ways to improve […]", „[…] proposed some design considerations […]" etc. without actually stating the ways that they would improve bug trackers (215,217,225). I would be interested in them, because without the information, the reader will only know that there's been research done on how to improve it, but not what/how it could actually be improved. Just stating an example or the general notion of the improvements would have probably been enough.

Similarly, a minor comment on 246: What is / does the CodeSaw project - is it just a visualisation tool? A short explanation would've been appreciated.

Explaining the technical term „benefits-realisation process" (300 & 320) would be beneficial for non-business-background readers.

You've stated that you'd examine the different ways/tools which are used for collaborative work (Zoom, GoogleDoc etc.) - the paper does not convince me that there could be an ideal communication tool. There are probably different needs for different types of communication („explorative" meetings vs. specific documentation vs. asynchronous text communication …). So can there really be an ideal communication tool? The 3rd research question seems to be either very hypothetical or would result in a big and complex hybrid communication tool.

Even though I've expanded a lot on the potential improvements, they are minor in comparison to the well structured and informative paper. Therefore I am in favour of accepting the paper as it poses a research question that shines light on the mostly neglected perspective of a domain expert. Furthermore, the related work section explores the work done so far extensively, and the research design allows for flexibility.

Seminar Assistant's Feedback for Review #2

Grade: 6.0
- --Good summary, but it might be good to add also how the authors want to shine
  a light on these issues (e.g. interviews)
- Good points on strengths and weaknesses
- ++Very good points on not mentioning some key results from related work
- Good points on explaining some technical terms