Title: Reducing the Effort of Bug Report Triage: Recommenders for Development-Oriented Decisions

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Question–Answer Form

• What is your take-away message from this paper?

Machine learning approach to create recommenders that assist with a variety of decisions aimed at streamlining the development process.

• What is the motivation for this work (both people problems and technical problems), and its distillation into a research question? Why doesn't the people's problem have a trivial solution? What are the previous solutions and why are they inadequate?

Their hypothesis is that a machine-learning-based technique can minimize the time and effort necessary for development-oriented bug triage choices. We examine two research topics in order to investigate this idea.

This article presents a machine learning approach to create recommenders that assist with a variety of decisions aimed at streamlining the development process.

We show that recommenders for which the developer should fix a bug can be *quickly* configured with this approach and that the configured recommenders are within 15% precision of hand-tuned developer recommenders.

• What is the proposed solution (hypothesis, idea, design)? Why is it believed it will work? How does it represent an improvement? How is the solution achieved?

Proposed solution machine learning approach to create recommenders that assist with a variety of decisions aimed at streamlining the development process.

After doing the experiment and compared to the previous solution they get the proof that it works.

- What is the author's evaluation of the solution? What logic, argument, evidence, artifacts (e.g., a proof-of-concept system), or experiments are presented in support of the idea?
 - The approach to solving the problem
 - Comparative experiment and solution
 - Result Evaluation
 - Compare the result with the previous solution's time, cost, and accuracy.
- What is your analysis of the identified problem, idea, and evaluation? Is this a good idea? What

flaws do you perceive in the work? What are the most interesting or controversial ideas? For work that has practical implications, ask whether this will work, who would want it, what it will take to give it to them, and when might it become a reality.

- ❖ I think if I want to answer the all above questions, I need to read at least 5-6 papers related to the same topics and apply the ways of the solution mentioned in those papers,s and performed an experiment by following their way of solution.
- What are the paper's contributions (author's and your opinion)? Ideas, methods, software, experimental results, experimental techniques...?
 - → Solution of the problem Ideas
 - → Methods
 - → Experimental Result
 - → Compare their result with their previous work.
- What are future directions for this research (author's and yours, perhaps driven by shortcomings or other critiques)?

The initial aim is to have the repository include the smallest set of best reports for the project so that development work may be focused on reports that lead to product enhancements. A trigger may conclude that the problem detailed in a new report has already been detected by an existing report; the new report can be annotated to indicate that no additional work is required for it. We call triage judgments made with the purpose of producing the smallest best collection of reports repository-oriented decisions.

• What questions are you left with? What questions would you like to raise in an open discussion of the work (review interesting and controversial points, above)? What do you find difficult to understand? List as many as you can.

Difficult to understand:

→ Their experiment result