From: Roni Stern [mailto:roni.stern@gmail.com]
Sent: Tuesday, February 13, 2018 00:10
To: Meir Kalech <<u>kalech@bgu.ac.il</u>>
Cc: Stahl, Michael <<u>michael.stahl@intel.com</u>>
Subject: Re: collaboration on automated debugging

Hi Michael

Thanks again for your time. I added my response inline, please let me know if additional data will help

If I get it right, you are looking for an industry partner, so you can, as part of the submission, show that you have a partner to work on this with.

#### **Roni: Exactly**

To check if there is anyone interested (at Intel or in other companies where I know people), you need to list what you need. I assume this is:

- Read access to the code
- Read access to the code repository system, to read check-in details
- Access to the tool-chain (the ability to create new builds)
- Access to the bug management system
- Access to the available tests

- Access to the CI or the test-automation framework to submit workloads and get the results. Alternatively: a duplication of the CI system.

## Roni: Yes, but a snapshot of the code and the current bug and revisions history will also be good enough.

The project characteristics:

- Above a certain size (how much?)
- Has large percentage of automated tests (so you can re-submit tests, or to modify tests and submit them)
- What type of application?
- Programming language?

Roni: Ideally a small-medium size project would be best, but any size available is OK. No special requirement on the percentage of automated test (but more is better) type of application (but standalone is better) or programming language.

Am I missing something?

Roni: No.

What is the benefit for the participating organization?

Roni: First, using the developed IP and tools. Second, the H2020 funds also the industry partner. In this project this will be around 0.5 Milion Euros, which is not huge but might help partially fund the contact industry person.

Also, if the industry partner is already thinking about getting into this (automated testing, debugging, and repairing)

then we can be helful.

Also, and I'm not sure how important this is, I think saying that there's a EU funded H2020 project in a company is a good thing to attract investors and academically inclined programmers.

Do you need any HW from the participating company (e.g. PCs to run tests)? This may be an issue, as new HW is always in short supply.

## Roni: We do not need HW, we have in our lab and the H2020 project comes with some funding for this.

Are you looking for an ongoing ("live") project, or prefer an old, completed project, where you can prove that your system locates the correct bug location (by comparing to the actual bug fix). I assume a "live" project. Benefits: may provide ROI during the project. Downside: on a new project everyone is busy and you will have a hard time getting anyone assigned to engage with you.

Roni: Both are OK. Ideally, a live project that has enough previous versions that we can enjoy all the benefits.

How much time do you estimate the partner company will need to invest?

## Roni: I think a person working on this around 25% of his time for the duration of the project should be enough.

Let me know.

# Roni: One thing to emphasize is that a reasonable way to work in my view is to have the relevant graduate student

work on site (e.g., at Intel's offices), signing NDAs and all that, so there is no need to export the code outside of intel.

But once you answer the above and add any other needed characteristics I can check for interest.

[...] (removed some Intel-specific details)

Michael