

Feedback from Breakout

GI with inadequate tests

Functional vs Non-functional GI

Lack of tests is not a big problem for non-functional GI

- Original system as oracle

- Test data generation

Focus on automated repair

We still need good tests

Test suite creation and/or augmentation

- Exceptions as test cases (for the complete lack of testing)

- Mutation testing

Extra value of existing tests

- Test hijacking

- Use tests from other bugs

Naturalness of program execution

Statistical models of “correct” and “natural” behaviour

Feedback from model to enhance existing tests

Possibly a smoother gradient

Anything other than tests?

Patterns of human-written patches

Fixes templates