Generative IA for test génération

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The recent advent of Generative AI, such as ChatGPT, is likely to revolutionize many professions. In the field of Software Engineering, GitHub Copilot competes with ChatGPT for automatic code writing.

This TER subject is more particularly interested in the generation of software tests, which are only a particular form of code. The expected work is as follows:

1. A bibliographic study of articles presenting Generative AI for testing, or comparing some of these tools. A summary list is given at the end of this document.
2. Getting to grips with some of these tools and experimenting with them on exam subjects given in Master GI or Miage.
3. Comparison of the results of these Generative AI on some common examples.

List of relevant urls

https://www.all4test.fr/blog-du-testeur/intelligence-artificielle-ia-appliquee-au-test-de-logiciel/

https://www.codium.ai/blog/chatgpt-for-automated-testing-examples-and-best-practices/

https://research.aimultiple.com/chatgpt-test-automation/

https://smartbear.com/blog/how-to-use-chatgpt-in-your-automated-tests/

https://about.codecov.io/blog/writing-better-tests-with-ai-and-github-copilot/

https://www.techtarget.com/searchenterpriseai/tip/GitHub-Copilot-vs-ChatGPT-How-do-they-compare