

Website: awesome-testing.com

Contact: <https://awesome-testing.com/contact>

AI in Testing: From ChatGPT to Test Code Generation

A practical workshop on prompt engineering, AI-assisted test design, and daily QA workflows with ChatGPT and modern AI IDEs.

Level: Foundations

Duration: 3 days

Mode: remote, onsite

Languages: PL, EN

Tooling: ChatGPT, Cursor, Copilot, Codex, Playwright, JavaScript, TypeScript, Playwright MCP, AI Agents

Details: <https://awesome-testing.com/workshops/ai-chatgpt-test-code>

Key outcomes

- Design effective prompts for test tasks and bug analysis
- Generate and validate test scenarios and test data with AI
- Use AI assistants safely in coding and review workflows

Full program

Learning objective

AI is becoming a core part of modern software engineering workflows. This workshop equips testers with practical knowledge and hands-on skills to use tools such as ChatGPT and AI-powered IDEs (for example Cursor) in daily quality engineering work.

After completing the workshop, participants will be able to:

- understand how large language models (LLMs) like ChatGPT work,
- create effective prompts that improve testing productivity,
- use AI responsibly when generating and reviewing automated test code.

Scope

- LLM fundamentals and practical understanding of ChatGPT
- Key concepts: AI, NLP, LLMs, prompts
- Model mechanics: tokenization, embeddings, attention mechanism
- Transformer architecture and model training basics
- Prompt engineering methods and best practices
 - role prompting ("act as")
 - few-shot prompting
 - chain-of-thought style reasoning
 - challenge/critique prompts
 - language strategy for prompting
- Testing-focused AI applications
 - test data generation
 - test case generation
 - pair-testing with AI
 - using AI to accelerate learning and analysis
- Practical exercise: generating CI setup (GitHub Actions) with AI
- AI IDE workflows (Cursor and similar)

- AI-assisted coding and refactoring for tests
- semantic search and working with technical documentation
- End-to-end workshop labs
 - building automated tests with Playwright and JavaScript/TypeScript
 - evaluating what to delegate to AI vs what to keep manual
- Risk and quality controls
 - common AI failure modes and hallucinations
 - safe usage patterns in test engineering
- Next-step learning paths, including API-level AI usage

Preparation

Who should attend?

The workshop is intended for testers and QA engineers who know programming fundamentals (preferably JavaScript).

What to prepare

Participants should bring a laptop prepared according to trainer instructions provided before the workshop.

Teaching methods

The training is predominantly hands-on workshop work supported by short theory modules. Participants learn through practical exercises and guided implementation.

Training materials

- workshop presentation,
- ready-to-run code examples (organized in branches/modules),
- working notes and reference links,
- additional guidance materials used during labs.

Benefits

- Strong practical understanding of LLMs in a testing context.
- Ability to design prompts that improve output quality and usefulness.
- Better use of AI IDEs for test development and maintenance.
- Hands-on experience generating and validating automated tests with AI support.
- Clear understanding of AI risks and how to apply safe team practices.
- A practical workflow that can be reused in real QA projects.