

AI-assisted Software Development

CL-AI | Onsite / Virtual classroom | 3 days

Audience: Developers

Preparedness: General software development

Exercises: Hands-on

Artificial Intelligence is here to stay, and those who fight against it will be left behind.

This comprehensive course on Artificial Intelligence and Software Development is designed to provide you with the tools and knowledge necessary to keep pace with rapidly-evolving technology trends.

By attending this course, you will learn how to use AI tools to increase productivity and improve collaboration, as well as how to build and deploy cutting-edge products.

With the insights and practical skills gained from this course, you will be well-positioned to stay ahead of the curve in today's fast-paced digital landscape.

Taking this course will not only equip you with the latest knowledge in AI development, but it will also provide you with the opportunity to collaborate with peers and gain insights into how AI can be used to test, refactor and analyze your code, even regarding security best practices.

Don't miss out on this opportunity to give yourself the edge you need to succeed in the era of AI!

Outline:

Understanding AI

AI and software development

Becoming more productive using AI tools

AI and privacy

Future of AI

Participants attending this course will:

Understand the basics of artificial intelligence

Be able to identify and explain the different forms of AI

Gain knowledge of AI technologies like NLP, computer vision, machine learning

Have the knowledge to use AI tools to increase productivity and efficiency

Understand and be able to manage licensing and privacy concerns

Gain practical experience using AI tools during development

Be able to prepare for the future of AI in software development

Related courses:

- CL-AIF – Artificial Intelligence Fundamentals

Detailed table of contents

Day 1

Understanding Artificial Intelligence

- What is AI?
- A brief history of AI development
- The current state of AI solutions
- Different forms of AI
 - Reactive Machines
 - Limited memory AI systems
 - Self-aware AI systems
 - Machine learning
 - Deep learning
- AI technologies
 - Natural Language Processing (NLP)
 - Computer Vision
 - Machine Learning & Deep Learning
 - Generative Adversarial Networks (GANs)

AI and software development

- Why AI won't take your job (yet)
 - The potential impact of AI on the software development industry
- Using AI tools to increase productivity
 - What is AI good at?
 - What are its limitations?
- Prompt engineering

Day 2

AI and software development

- AI tool landscape
 - GitHub's Copilot
 - OpenAI
 - ChatGPT
 - DALL E 2
 - Codex
 - Midjourney
 - Google Bard
- AI product licensing questions
 - Generated code license
- AI and privacy
 - Who owns the model?

Become more productive using AI tools

- Core principles to keep in mind
- Using AI in product management
 - Requirements engineering
 - Product research
 - Exploring client pain points and needs
 - Generating UI wireframes and sketches
- Challenge and augment your thinking
 - Generate architecture diagrams
 - Supercharge your retrospective with an AI teammate
 - Use AI to summarize notes

Day 3

Become more productive using AI tools

- Collaborating
 - An AI chatbot is your next team member
 - Training your own chatbot
 - Customer trained AI as your "real customer"
- Bulletproof releases with AI
 - Estimate the stability of your releases

- Generate documentation
- Reduce operations by spotting hidden wins
- Effective planning with AI
 - Backlog grooming
 - Story definitions
 - Improving your estimates
 - Estimating costs
- Supercharge development efforts with AI
 - Generate code at the speed of light
 - Refactoring
 - Generate proof of concepts
 - Generate test-cases
 - TDD with OpenAI's Codex

What's next?

- Future of AI in Software Development
 - Emerging trends and advancements in AI
 - Preparing for the future of AI in software development

Conclusion

- Recap of key points
- Q&A session