



Mission
Automate!



Your TOP RATED + Artificial
Intelligence team since 2017

AI in Action: Practical Automation

Alex Panait Founder & CEO of Mission Automate



Mission Automate!

- Mission Automate is specialized in custom AI development.
- We work with both enterprise and SMB companies.
- This year we started releasing our own AI powered products.
- We have more than **100 successfully released projects** in **14 countries** worldwide.

Our AI expertise includes:

1. Deep Learning
2. Natural Language Processing
3. Open AI
4. Gemini
5. TensorFlow
6. PyTorch
7. Amazon SageMaker
8. Google Vertex AI



Agenda

1. AI use cases
2. The Big LLMs
3. AI Tools
4. Prompt engineering examples
5. Hallucinations
6. Thought leaders
7. QnA



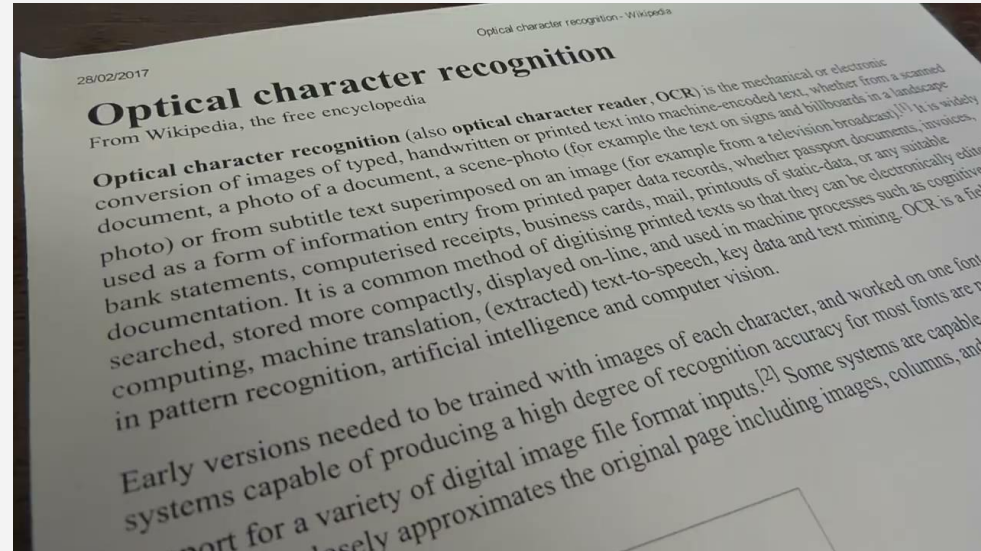
AI has transformed how we live, work, and play.

Major AI use cases

1. Vision:

- a. Image Classification
- b. Object Detection
- c. Facial Recognition
- d. Optical Character Recognition (OCR)

- Mission Automate developed an application that processes sewing patterns and analyzes individual shapes.
- We used an **image classification ML model** to categorize shapes and a **cloud OCR solution** to scan the text from the patterns.
- The application allows the user to upload a pattern and provide corrective feedback to the ML predictions.

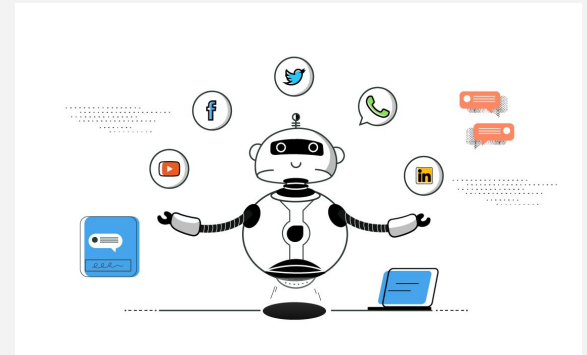


Major AI use cases

2. NLP:

- Sentiment Analysis
- Translation
- Chatbots
- Text Summarization

- We implemented an ML model, which performs **sentiment analysis based on keywords** from product reviews.
- Final output includes sentiment analysis for specific features of each product in the catalog.



Major AI use cases

3. Generative AI:

- Generate Images
- Write Text
- Generate Audio or Music
- Generate Video

- We implemented a **custom application** by connecting multiple AI technologies to transcribe and translate text from audio files, clone person's voice, and generate videos of **custom video avatars** speaking in multiple languages.
- As a result, the client has their **own product** to generate **content in multiple languages** instead of piecing together multiple services at a costly rate.



The Rise of LLMs

ChatGPT















Gemini



Claude



Comparing tools

1. ChatGPT 
2. Gemini 
3. Claude 
4. Midjourney 
5. DALLE  DALL·E
6. Read.AI 
7. ElevenLabs 
8. Sync Labs 
9. Runway  runway
10. SUNO 
11. GitHub Copilot  GitHub Copilot
12. Gamma 



Prompt Engineering is programming with natural language

Interdisciplinary approach: This new discipline combines linguistics, psychology, and computer science.

Future potential: As AI advances, prompt engineering will play a crucial role.

Contextual relevance: Clear and relevant prompts produce better outputs.

Example: Summarizing Text

Read this text and summarize the main items in a bulleted list.

Each bullet should be only one sentence.

Convert technical language to more accessible vocabulary.

Example: Learn a new skill

Generate a learning plan to become experienced in AI. Start from the fundamentals all the way to training and deploying an AI model.

Example: Gamma

Generate a presentation for a business development strategy for an AI software consultancy focusing on hyper-personalization that includes the type of services offered, where to find leads, social media promotion and other marketing, as well as any other useful information.

Example: Writing text

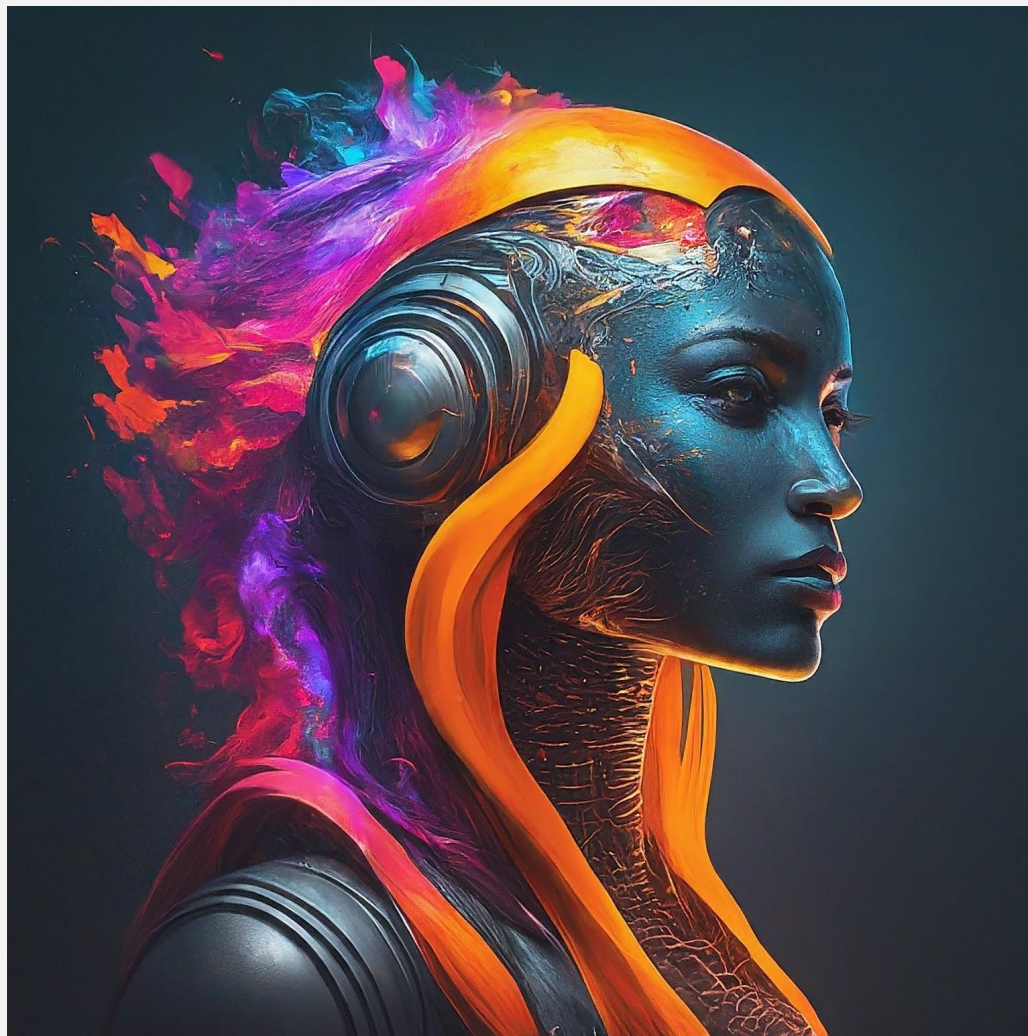
1. I want to start a business selling revolutionary apple slicers. Generate an outline of a business plan. Be sure to include resources where we can find templates.
2. Generate an executive summary draft for this business.

Example: Asking for information

What are the current trends in SaaS product offerings and what are the underlying causes? Please include the main points without getting into superfluous details. Your reply should be accessible to a layman and at most three paragraphs long.

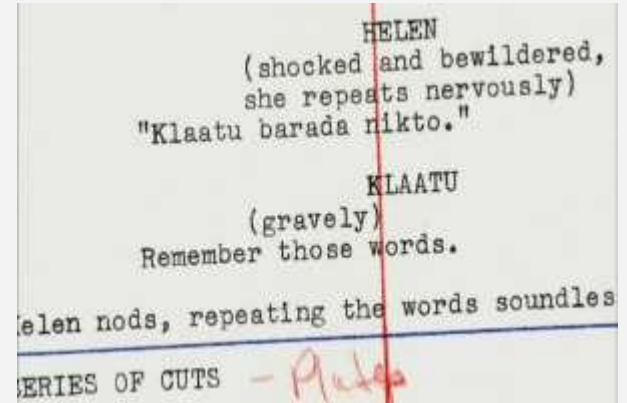
Example: Image generation

I represent an AI software development company and I would like to make a LinkedIn post for the start of fall season. Please generate a positive and colorful image, that represents me and that reflects my industry and professional environment, so that I can include it in my post. Also include a draft for the post itself.



Dealing with hallucinations

1. LLMs will make things up.
2. It's important to double-check the information.
3. Sometimes it's enough to ask the LLM whether any of the information is made up.



~~KLAATU~~ KLAAJU

AI Thought Leaders

**Andrew
Ng**



1. **"How to Be an Innovator"** (MIT Technology Review, 2023):
<https://www.technologyreview.com/2023/09/12/1078367/andrew-ng-innovator-ai/>
2. **"Patterns of Progress: Andrew Ng Eyes a Revolution in Computer Vision"** (Datanami, 2024):
<https://www.datanami.com/2023/11/06/patterns-of-progress-andrew-ng-eyes-a-revolution-in-computer-vision/>
3. **"Why It's Time for 'Data-Centric Artificial Intelligence'"** (MIT Sloan, 2022):
<https://mitsloan.mit.edu/ideas-made-to-matter/why-its-time-data-centric-artificial-intelligence>

AI Thought Leaders

**Alex
Karp**



"Davos 2023: A Conversation with Alex Karp" (World Economic Forum, 2023):

<https://www.weforum.org/videos/davos-am23-a-conversation-with-alex-karp-ceo-of-palantir-english/>

AI Thought Leaders

Demis Hassabis



1. **"Demis Hassabis Knighthood: From Tech Prodigy to AI Leader"** (AI Magazine, 2023):
<https://aimagazine.com/machine-learning/demis-hassabis-knighthood-from-prodigy-to-ai-leader>
2. **"Demis Hassabis Reveals DeepMind's Gemini, an AI Algorithm Set to Surpass OpenAI's ChatGPT"** (Unboxed Magazine, 2023):
<https://unboxedmagazine.com/technology/demis-hassabis-reveals-deepminds-gemini-an-ai-algorithm-set-to-surpass-openais-chatgpt/>

AI Thought Leaders

**Sam
Altman**



1. **"Planning for AGI and Beyond"** (OpenAI, 2023):
<https://openai.com/index/planning-for-agi-and-beyond/>
2. **"Sam Altman on the Future of AI"** (World Economic Forum, 2024):
<https://www.weforum.org/agenda/2024/01/davos-2024-sam-altman-on-the-future-of-ai/>

AI Thought Leaders

**Lilly
Wachowski**



1. **"The A.I. Language in DGA's Deal Is Stronger Than You Think, but Not as Strong as You'd Like"** (IndieWire, 2024):
<https://www.indiewire.com/news/analysis/dga-deal-ai-terms-explained-1234875624/>
2. **"The Matrix Co-Director Is Finally Back With A New Movie – But It's Not Science Fiction"** (SlashFilm, 2024):
<https://www.slashfilm.com/1515702/the-matrix-co-director-finally-back-wit-h-new-movie-trash-mountain/>



Q&A

Contact us!



www.missionautomate.com



linkedin.com/company/mission-automate/



alex@missionautomate.com



Global team, HQ in California

AI in Action: Practical Automation

Aug 14, 2024



Consultation

Contact us!



www.missionautomate.com



linkedin.com/company/mission-automate/



alex@missionautomate.com



Global team, HQ in California

We're happy to help you understand AI technologies and provide insights to your AI project.

Please visit our website to book a consultation.



Mission
Automate!

**Thank you for
attending our webinar!**

Your TOP RATED + Artificial
Intelligence team since 2017

AI in Action: Practical Automation

Alex Panait Founder & CEO of Mission Automate