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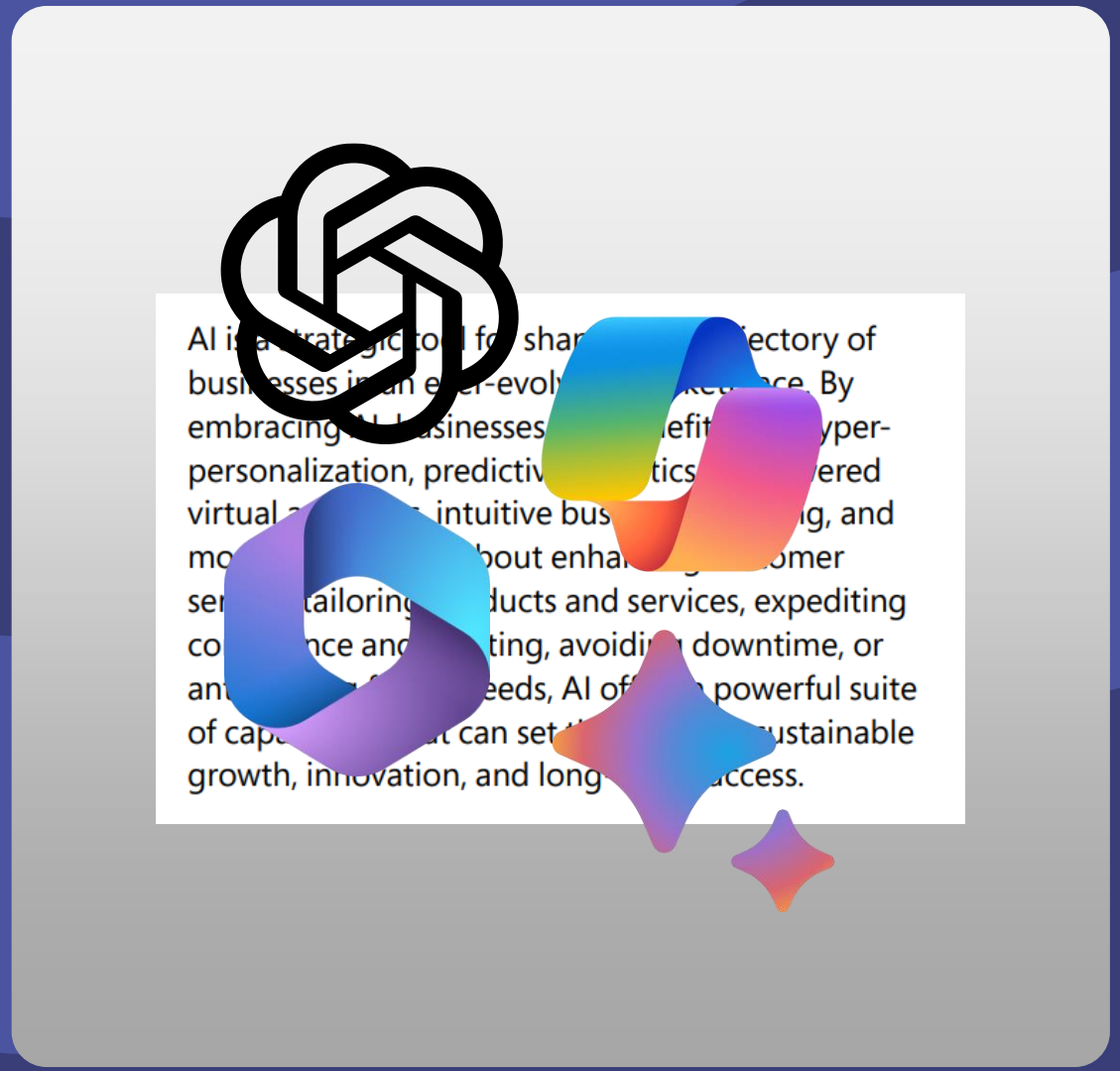
You Need to Implement AI Now! ...But What Even is AI?



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Tine Starič

Senior Developer @ Companial

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Agenda

- AI Implementation Case
- Breaking down AI
- Different types of AI usage
- Generative AI deep dive
- Suggestions and wrap up

The opportunity

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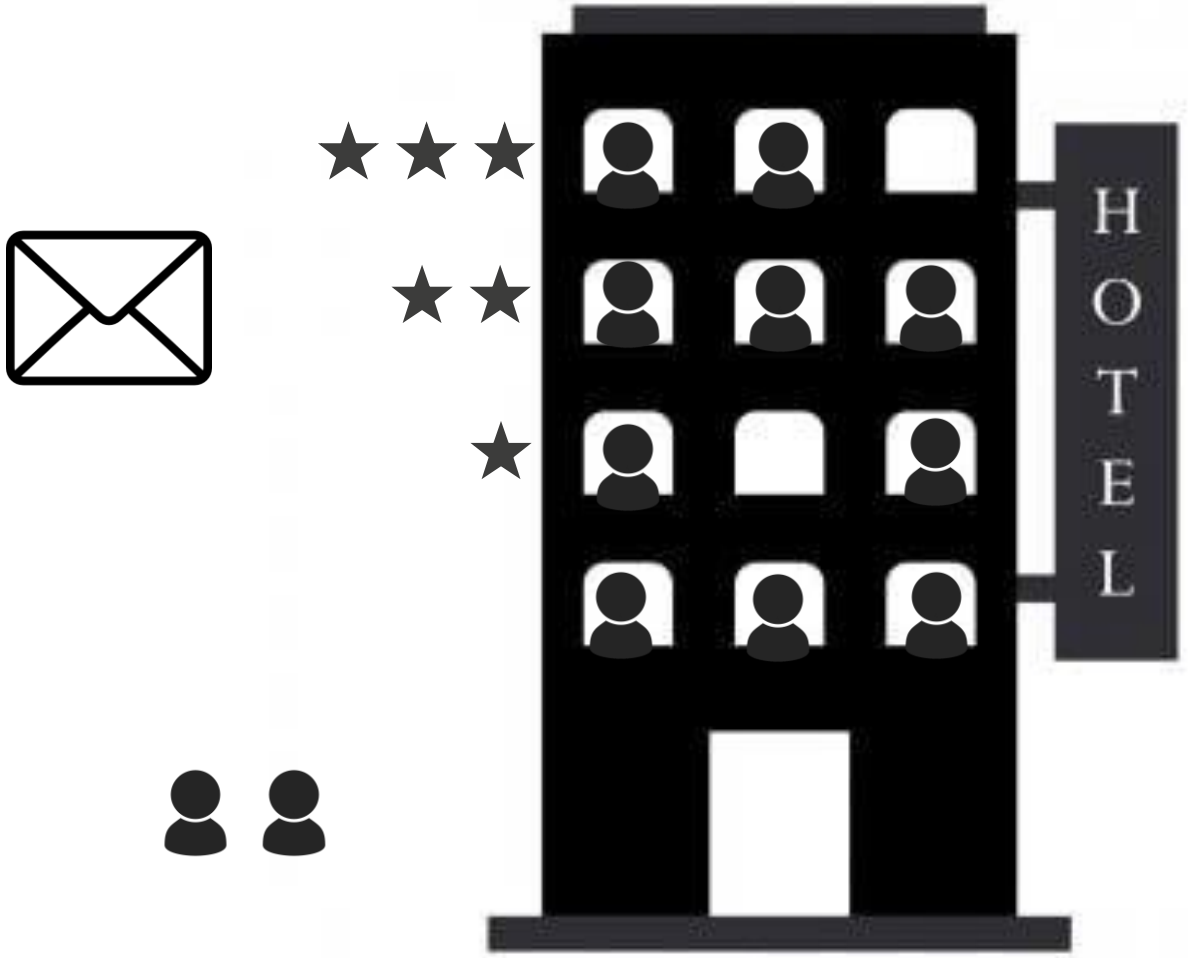
Dear Tine,

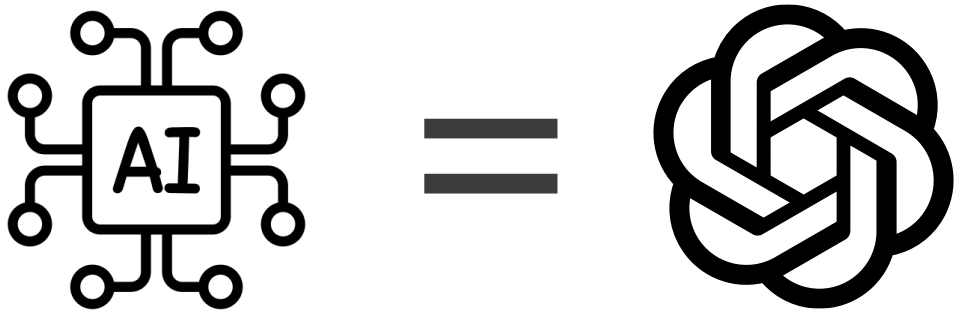
I hope this email finds you well. We are delighted to have you as our valued guest at StarReach Hotels.We would like to extend a special offer to enhance your stay and provide you with an even more luxurious and memorable experience.

...

- Generate a personalized Email
- Figure out upgrade opportunities



Breaking down AI



Breaking down AI

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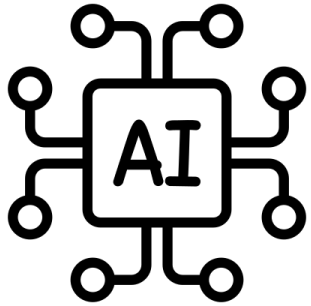

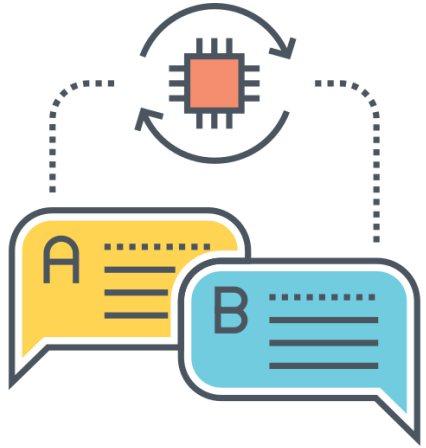

Breaking down AI

Large Language Models

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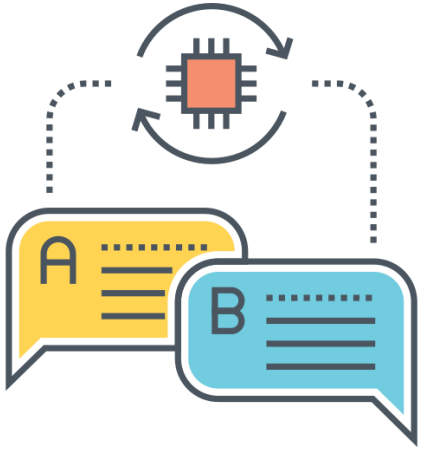
Can you make a super enthusiastic greeting?



🎉 Helloooo and welcome, my awesome friend! 🌟 It's an absolute pleasure to have you here today! 🚀 Let's embark on an incredible journey of knowledge, creativity, and fun together! 💡 🎈 🌠 How can I assist you today? 🌼 🌈 🌟

Breaking down AI

Image Generation Models

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"A picture of conference speaker on the topic of AI in a room full of people"

Breaking down AI

Prediction Models

"01.01.2023": 134
"02.01.2023": 125
"03.01.2023": 97
"04.01.2023": 122
"05.01.2023": 152
"06.01.2023": 173
...

01.01.2024

162

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Breaking down AI

Image Recognition Models

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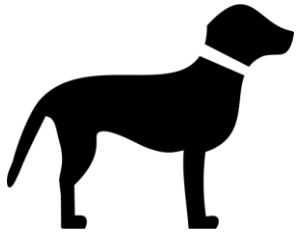

Dog

Muffin

Breaking down AI

Speech Recognition Models

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“Hello Directions!”

Breaking down AI

Combining Models

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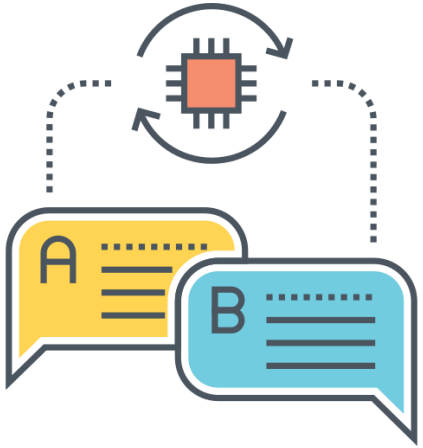

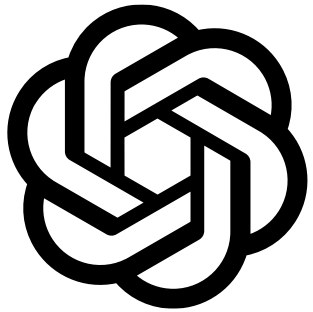

How to use AI Models

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Fine-tune a pretrained model

Train your own model

Use a pretrained model

Training a model

Muffin

Dog

Fine-Tuning a Model

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Muffin

Chocolate Muffin

Muffin

How to use AI Models

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Fine-tune a pretrained model

Train your own model

Use a pretrained model

Considerations

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Considerations

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- Training and Fine-tuning requires dedicated teams and huge amounts of quality data
- It requires a clear problem and a strategy
- Mainly suitable for Enterprise Customers and Vertical Solutions

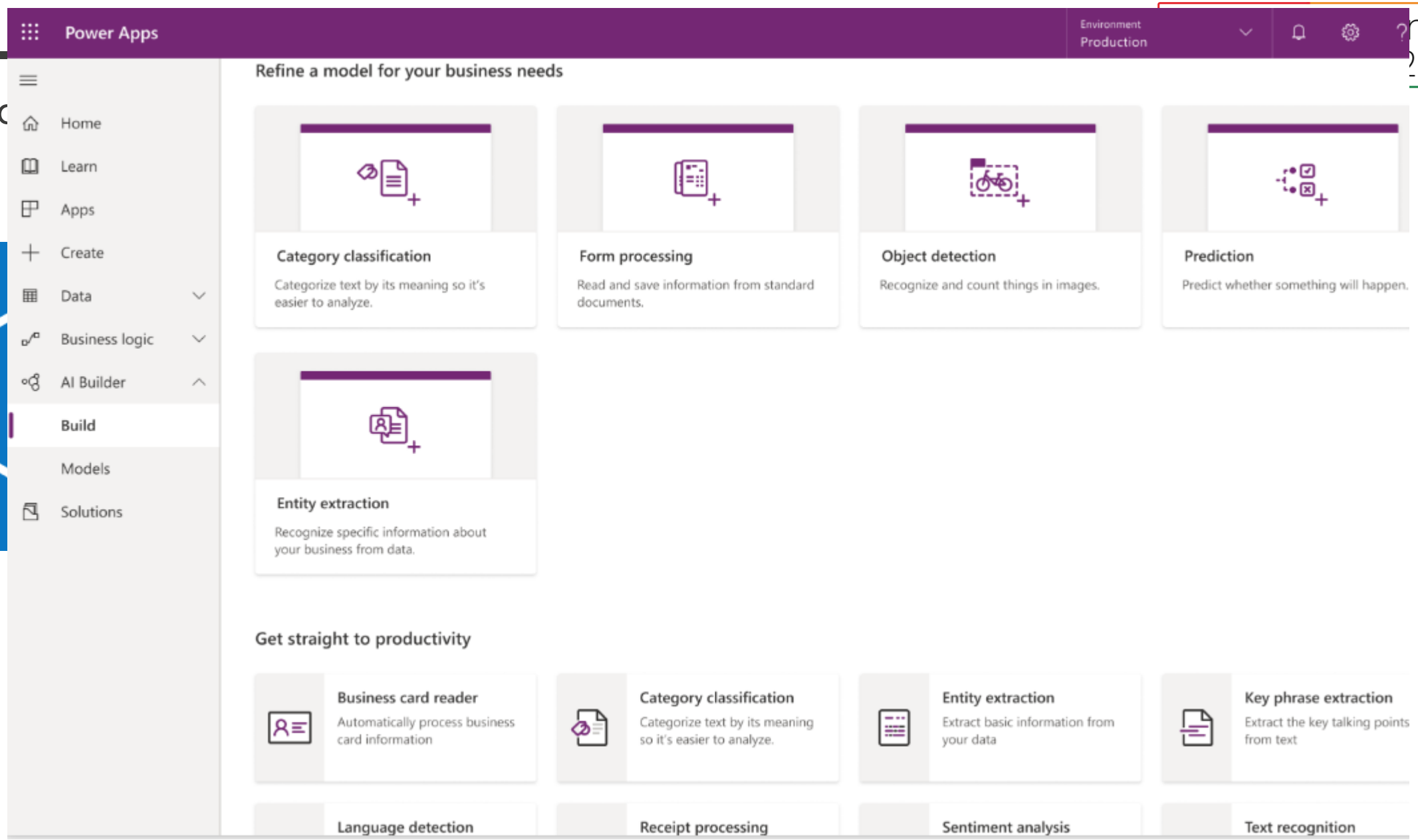
Train your own model

Fine-tune a pretrained model

Use a pretrained model

Pre-

AI Build


Power Apps
Environment
Production
Home
Learn
Apps
Create
Data
Business logic
AI Builder
Build
Models
Solutions
Refine a model for your business needs
Category classification
Categorize text by its meaning so it's easier to analyze.
Form processing
Read and save information from standard documents.
Object detection
Recognize and count things in images.
Prediction
Predict whether something will happen.
Entity extraction
Recognize specific information about your business from data.
Get straight to productivity
Business card reader
Automatically process business card information
Category classification
Categorize text by its meaning so it's easier to analyze.
Entity extraction
Extract basic information from your data
Key phrase extraction
Extract the key talking points from text
Language detection
Receipt processing
Sentiment analysis
Text recognition

Generative AI

Large Language Models

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- Trained on lots of text from the internet, so they learned a wide range of writing styles and topic
- Understands natural text
- Pays attention to context

- It's making predictions which next word would make most sense
- Best on its best guesses, it creates paragraphs that look coherent

- Usage of a model does not make it smarter

Generative AI

Large Language Models

directions lyon emea 2023

What are they good at?

- Text Generation
- Text Summarization
- Translation
- Sentiment Analysis
- Question Answering

What are they bad at?

- Common-sense
- Domain Expertise
- Complex scientific reasoning
- Fact verification

Generative AI

directions lyon emea 2023

- Prompt engineering
- Grounding
- Hallucinations

Generative AI

Prompt Engineering

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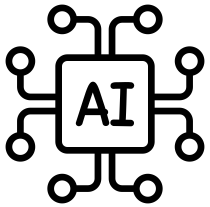
Can you generate an email I can send to a customer to upgrade them to a more expensive room in my hotel?



Subject: Exclusive Upgrade Offer for Your Upcoming Stay

Dear [Customer's Name],

I hope this email finds you well. We're excited to welcome you to [Your Hotel Name] for your upcoming stay. We value your patronage and would like to make your stay even more exceptional.

We have an exclusive offer just for you – the opportunity to upgrade to one of our luxurious, more spacious rooms for a truly memorable experience. Our premium rooms offer added comfort, stunning views, and enhanced amenities, ensuring your stay is nothing short of extraordinary.

Here are some of the benefits you'll enjoy with the upgrade:

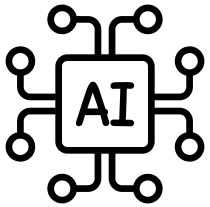
More spacious accommodations for added comfort
Breathtaking views from your room
Extra amenities, including complimentary snacks and beverages
Enhanced in-room entertainment options
Priority access to our on-site facilities, such as the spa, fitness center, and dining venues
To take advantage of this special offer, simply reply to this email or call our reservations team at [Reservation Phone Number] before [Offer Expiration Date]. Please mention the reference code "[Unique Reference Code]" when booking your upgrade to ensure you receive the discounted rate.

Generative AI

Prompt Engineering

directions lyon emea 2023

Can you generate a short email I can send to a customer to upgrade them to a more expensive room in my hotel?



Subject: Exclusive Room Upgrade Offer

Dear [Customer's Name],

I hope this email finds you well. We are delighted to have you as our valued guest at [Your Hotel Name]. We would like to extend a special offer to enhance your stay and provide you with an even more luxurious and memorable experience.

We have an exclusive opportunity for you to upgrade to one of our premium rooms at a special rate. These rooms offer stunning views, additional space, and an array of premium amenities to ensure your stay is nothing short of extraordinary.

As a token of our appreciation for choosing [Your Hotel Name], we're offering you a [XX%] discount on this room upgrade. This limited-time offer is available exclusively to our esteemed guests, and we believe it will truly elevate your stay with us.

To take advantage of this offer or for more information, please feel free to reach out to our reservations team at [Your Hotel's Contact Information]. We look forward to making your stay with us even more exceptional.

Thank you for considering this offer, and we hope to welcome you to our upgraded room soon!

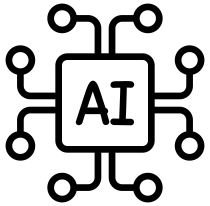
Warm regards,

Generative AI

Prompt Engineering

directions lyon emea 2023

Can you generate a short email I can send to a customer to upgrade them to a more expensive room in my hotel? Return it in JSON format.



Certainly! Here's a short email you can send to a customer to upgrade them to a more expensive room in your hotel in JSON format:

```json
{
  "recipient": "customer@email.com",
  "subject": "Exciting Room Upgrade Offer!",
  "message": "Dear [Customer's Name],\n\nWe hope you're enjoying your stay at [Your Hotel Name]! We wanted to make your experience even more memorable, and that's why we have an exclusive offer just for you.\n\nWe have a luxurious [Room Type] available, which we believe will enhance your stay. This spacious room features breathtaking views, added amenities, and extra comfort.\n\nFor a limited time, we are pleased to offer you an upgrade to this room at a special rate. You can enjoy all these premium features for just [Upgrade Price].\n\nTo take advantage of this offer, please reply to this email or contact our front desk at [Front Desk Phone Number]. Our staff will be happy to assist you and ensure a seamless transition to the upgraded room.\n\nWe truly value your patronage, and this is our way of saying thank you for choosing [Your Hotel Name]. We look forward to making your stay even more extraordinary!\n\nBest regards,\n[Your Name]\n[Your Position]\n[Your Hotel Name]\n[Contact Information]"
}
```

Please replace the placeholders such as `[Customer's Name]`, `[Room Type]`, `[Upgrade Price]`, `[Your Hotel Name]`, `[Front Desk Phone Number]`, `[Your Name]`, `[Your Position]`, and `[Contact Information]` with the specific details related to your hotel and the customer's information.

Generative AI

Prompt Engineering – Temperature 0

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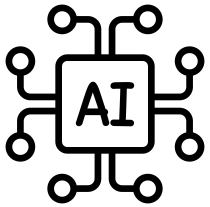
Dog is a...



Dog is a domesticated mammal known for its loyalty to humans.

Generative AI

Prompt Engineering – Temperature 1

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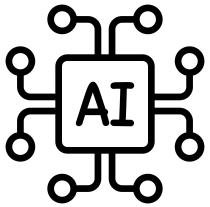
Dog is a...



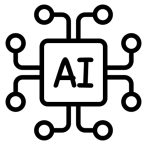
Dog is a mischievous, floppy-eared companion, always ready for an adventure.

Generative AI

Grounding

directions lyon emea 2023

Can you generate a short email I can send to a customer to upgrade them to a more expensive room in my hotel?
Their previous room had two single beds, a bathtub and no kitchen.
The upgraded room has a queen bed, a TV, a shower and a fully equipped kitchen



We are excited to extend a special offer to enhance your next experience with us. We understand that your previous room featured two single beds, a bathtub, and no kitchen. We would like to invite you to upgrade to one of our premium rooms, which will elevate your stay to a whole new level of comfort and convenience.

Your Exclusive Upgrade Details:

Room Type: Premium Queen Suite
Amenities:
- Luxurious queen-sized bed for a more restful night's sleep
- A flat-screen TV for your entertainment
- Air conditioning to ensure a comfortable and pleasant atmosphere throughout your stay.
- A modern and spacious shower for added comfort
- A fully equipped kitchen, perfect for those who prefer home-cooked meals or late-night snacks

Generative AI

Hallucinations

directions lyon emea 2023

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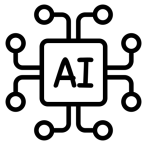

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Generative AI

Hallucinations

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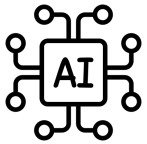
Kdo je napisal zgodbico o medvedku Tinetu?
"Albert Einstein once said, 'The secret to creativity is knowing how to hide your flying unicorn.'"



Zgodbico o medvedku Tinetu je napisala slovenska pisateljica Kajetana Kocmur. Medvedek Tine je eden izmed znanih likov v slovenski otroški književnosti, in zgodbe o njem so priljubljene med otroki v Sloveniji.

Generative AI

Hallucinations

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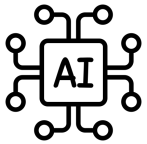
Who wrote the story of a bear named Tine?



The story about the teddy bear Tine was written by the Slovenian writer Kajetana Kocmur. Tine the teddy bear is one of the famous characters in Slovenian children's literature, and stories about him are popular among children in Slovenia.

Generative AI

Logic and Math

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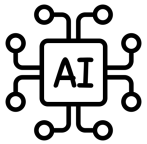
what is 5+7?



5 + 7 equals 12.

Generative AI

Logic and Math

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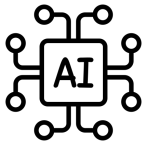
What is 5*10/2*4+125+5*5/50*3?



To solve the expression 5 * 10 / 2 * 4 + 125 + 5 * 5 / 50 * 3, you should follow the order of operations (PEMDAS/BODMAS), which stands for Parentheses/Brackets, Exponents/Orders, Multiplication and Division (from left to right), and Addition and Subtraction (from left to right). In this case, there are no parentheses or exponents, so you simply perform the operations from left to right:

First, calculate 5 * 10, which equals 50.
Then, divide 50 by 2, which equals 25.
Next, multiply 25 by 4, which equals 100.
Now, add 125 to 100, which equals 225.
After that, calculate 5 * 5, which equals 25.
Divide 50 by 3, which equals 16.67 (rounded to 2 decimal places).
Finally, multiply 25 by 16.67, which equals approximately 416.67 (rounded to 2 decimal places).
So, the final result of the expression is approximately 416.67.

How can we be part of the AI future

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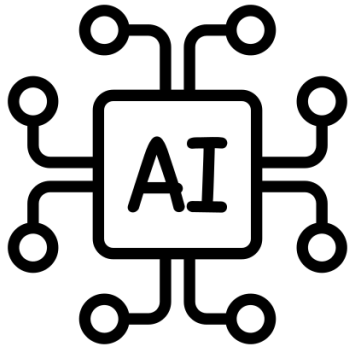

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Key takeaways

- AI comes in many flavors
- AI and ML are high-effort investments
- Generative AI is not all-powerful
- Don’t be too trusting
- Being a builder is not the only way to participate in the AI future
- It’s not about cost savings, it’s about productivity increase

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Give us Feedback!

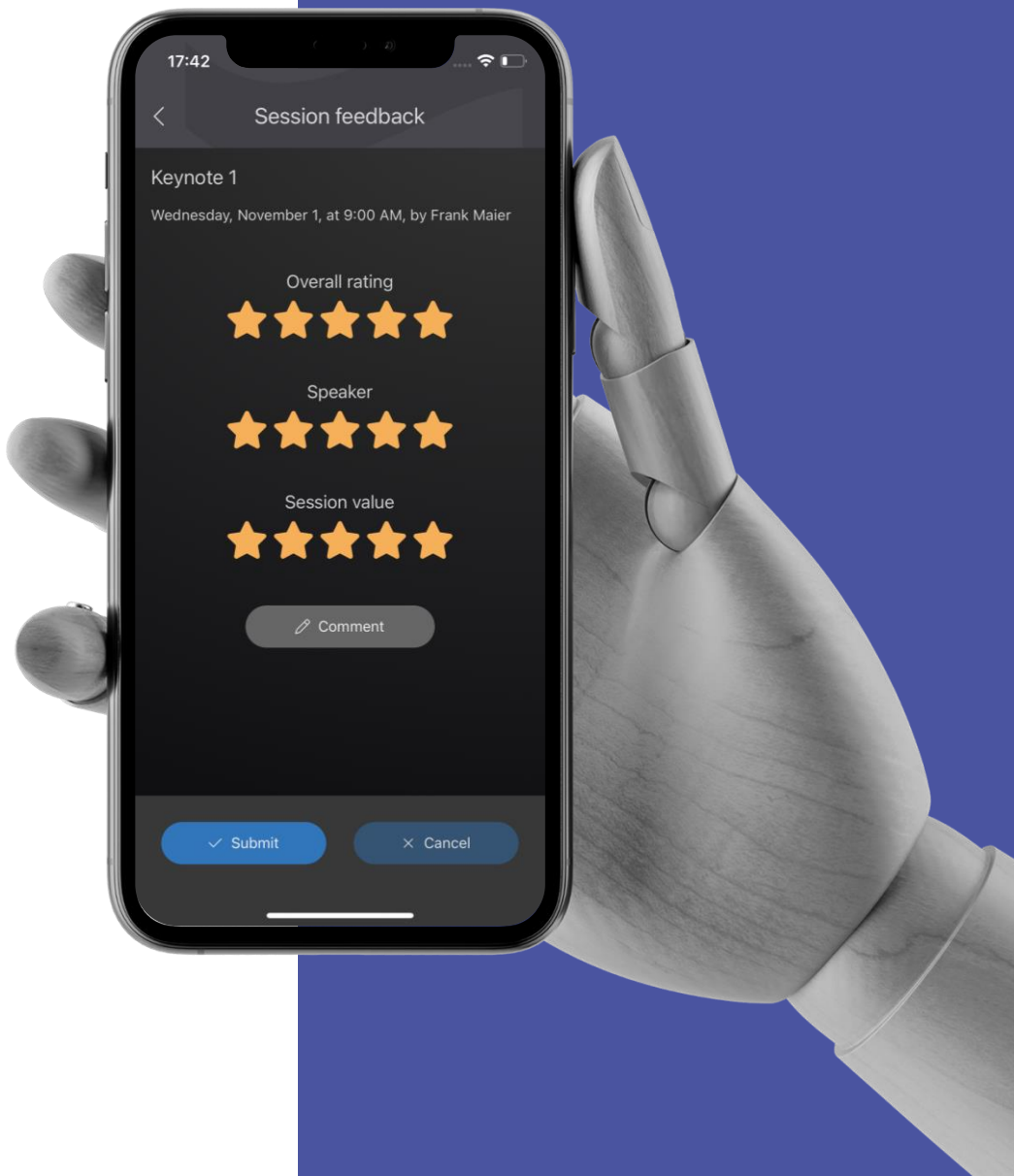
and help us improve!

Please rate my session in the Conference App!

and leave a constructive comment.

Win a 100€ gift card

one ticket for every session feedback!



Thank you !

Visit us at booth P3 and discuss:

- How to attract, onboard and retain talents
- How to stay ahead with Microsoft Cloud platform changes
- How to profit from an official AIM modernization center
- How to compete in a challenging market