The Future of UX Leveraging Al for Design, Research, & Career Growth

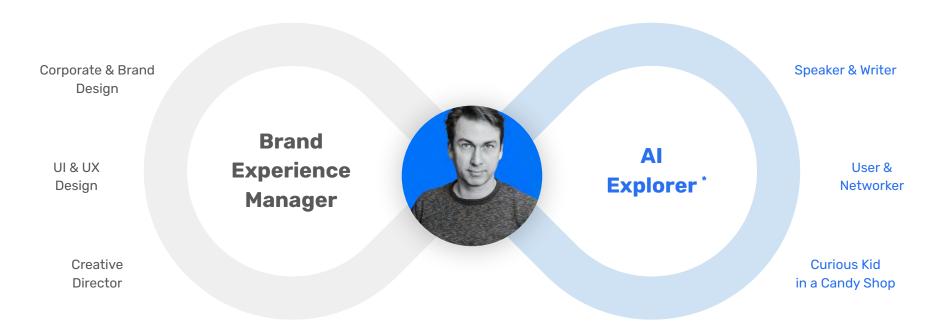
Boye Aarhus 23 Conference UX Track – Handout 7. Nov. 2023, Dennis Oswald



Netgen.
SWITZERLAND

Hello, I am **Dennis**

Netgen Switzerland

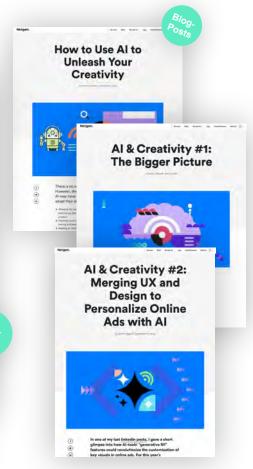


Me, getting on people's nerves ...





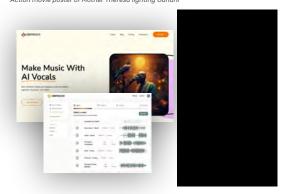




Me, being a curious kid in a candy shop ...



As a movie enthusiast, I now can invision the wildest ideas - e.g. prompt movie posters with midjourney from a single line of prompt, e.g.: Action movie poster of Mother Theresa fighting Gandhi





Can you think of a wordpun as we trained above on "Ostrich"?



Of course, here's a word pun with "Ostrich" in English:



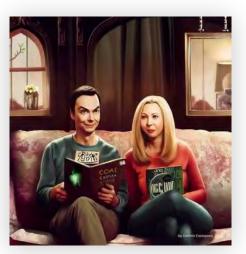
Wordplay: "Ostretch" Concept: An ostrich that practices yoga and stretching exercises, showcasing impressi flexibility and balance while encouraging others to stay limber and fit.

Chit-chat with ChatGPT and Midjourney about ideas for my "Fantas.Tiere" pun project









or imagine dialogs (midjourney) and animate them with "D-ID" that have never happened.





«If you had chosen a term other than artificial intelligence in the early years, something boring like symbolic analysis or pattern matching, which would be also true, then people today wouldn't be freaking out so much.»

"Wenn man in den Anfangsjahren einen anderen Begriff gewählt hätte als künstliche Intelligenz, irgendwas Langweiliges wie symbolische Analyse oder Musterabgleich, was auch zuträfe, dann würden die Menschen heute nicht so sehr ausflippen." Andrew McAfee SPIEGEL Interview, Nr. 10/2023

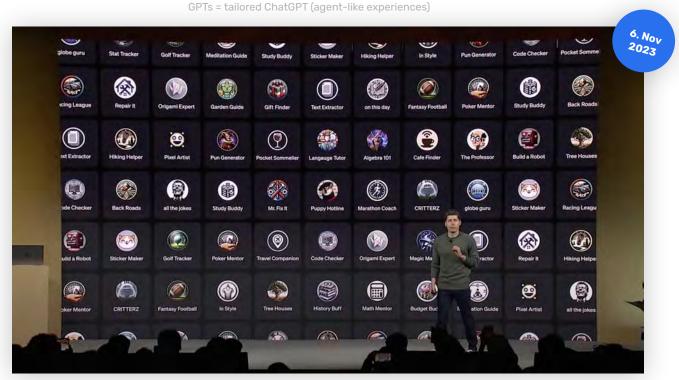
342 days ago

The iPhone (or Oppenheimer) Moment for Al 2 months to hit 100m monthly users



13.5 hours ago

6.11.2023 DevDay OpenAI, 6pm-11:30, San Francisco



Al image generation



Al image generat



-v1 Feb 2022



CAT in 2017



CAT in 2022



CAT in 2023 generated with creamAl Alpha





-v 5.2 ne 23, 2023

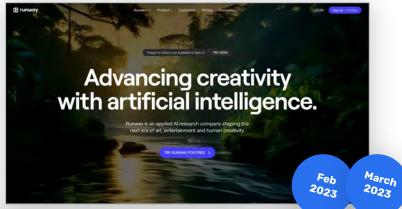






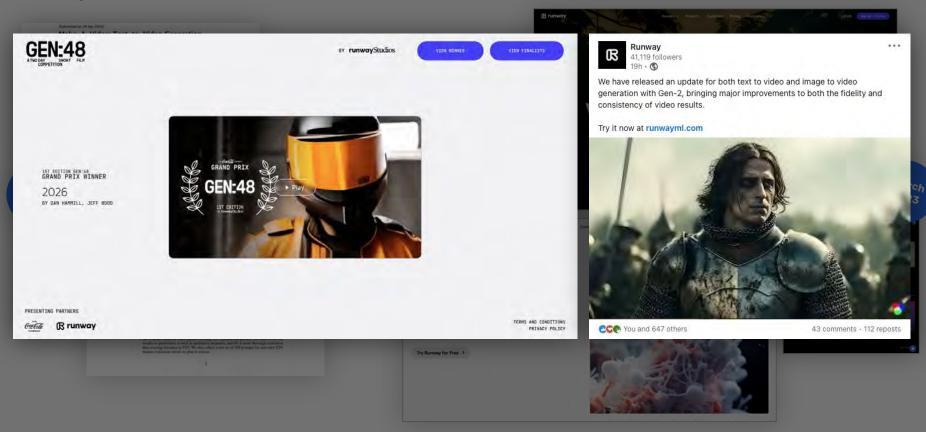
Al video generation





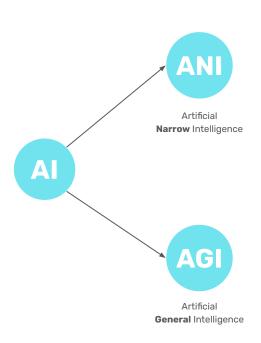


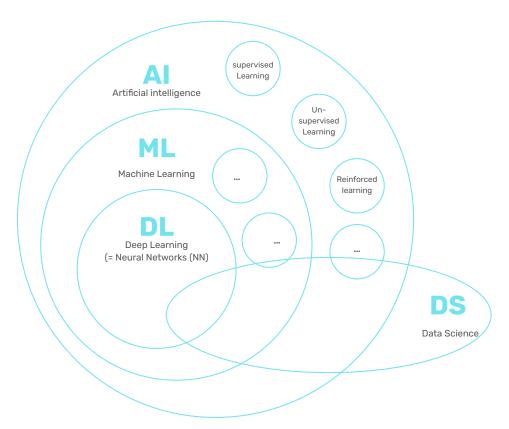
Al video generation





Terminology of «AI»





Large Language Models

Darling,
have you
forgotten
today is...

7th Nov. 2023

... Tax Deadline
... Wedding Day

Large Language Models



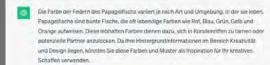
What color are the feathers of the parrotfish?

Darli have forgotoda



The color of parrotfish feathers varies depending on the species and the environment in which they live. Parrotfish are colorful fish, often featuring vibrant colors such as red, blue, green, yellow and orange. These vibrant colors are used to camouflage themselves in coral reefs or to attract potential mates. Since your background is in creativity and design, you could use these colors and patterns as inspiration for your creative work.





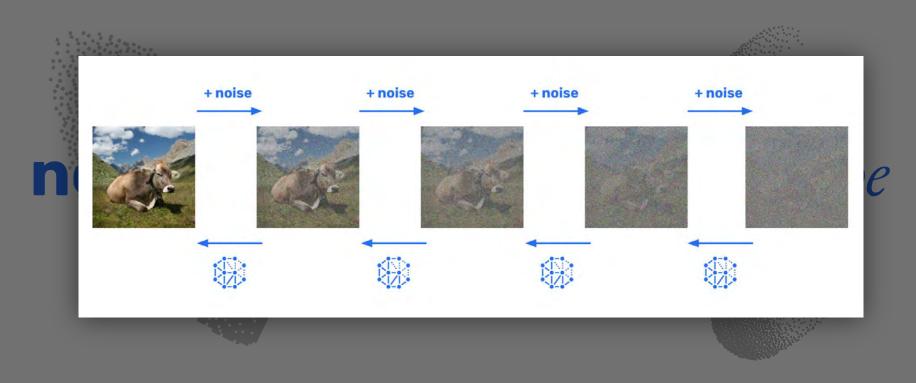
Diffusion Models







Diffusion Models

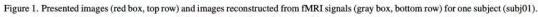


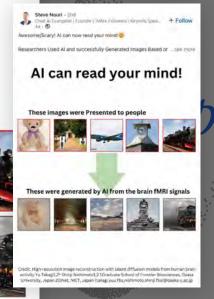
Diffusion Models

High-resolution image reconstruction with latent diffusion models from human brain activity

> Yu Takagi 1,2* Shinji Nishimoto^{1,2} ¹Graduate School of Frontier Biosciences, Osaka University, Japan ²CiNet, NICT, Japan {takagi.yuu.fbs,nishimoto.shinji.fbs}@osaka-u.ac.jp







How Al will impact your everybody's iob!



*Not

Yeah, I know I should use the other terms like Machine learning or Deep learning instead of AI, but you know... I won't

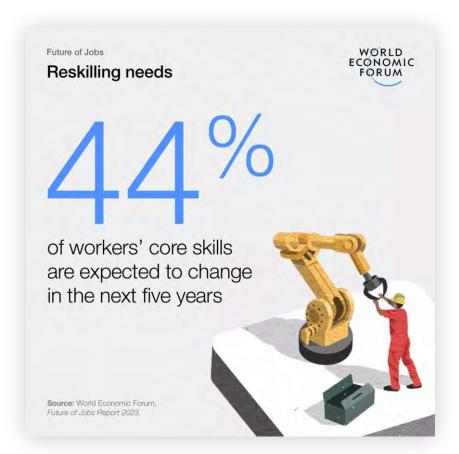
Why is this crucial for everyone?

- ...impact your trainings
- ...update your tool sets
- ...change your processes
- ...re-structure your team
- ...leverage your clients
 - ...put your job for debate
- ...impact society & reality

Future of Job Report

2023 - WEF

«Artificial intelligence, a key driver of potential algorithmic displacement, is expected to be adopted by nearly 75% of surveyed companies and is expected to lead to high churn – with 50% of organizations expecting it to create job growth and 25% expecting it to create job losses.»



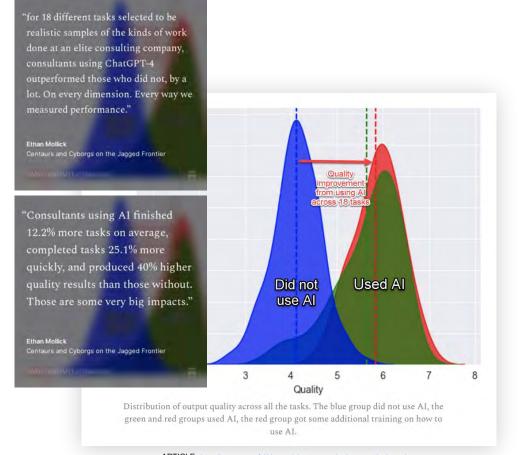
https://www.weforum.org/reports/the-future-of-jobs-report-2023/infographics-2128e451e0

Harvard Business School

Boston Consulting Group



PAPER https://www.hbs.edu/faculty/Pages/item.aspx?num=64700



ARTICLE https://www.oneusefulthing.org/p/centaurs-and-cyborgs-on-the-jagged

Nature

Al and science: what 1,600 researchers think

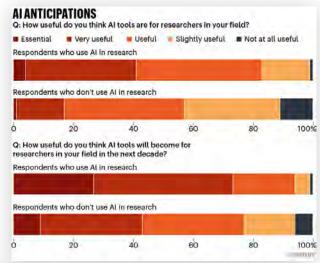
NEWS FEATURE | 27 September 2023 | Correction 10 October 2023 Al and science: what 1,600 researchers think A Nature survey finds that scientists are concerned, as well as excited, by the increasing use of artificial-intelligence tools in research. Richard Van Noorden & Jeffrey M. Perkel

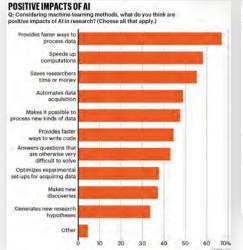
Article

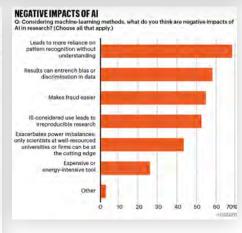
https://www.nature.com/articles/d41586-023-02980-0

PDF

https://www.nature.com/articles/d41586-023-02980-0.p df?pdf=button%20sticky

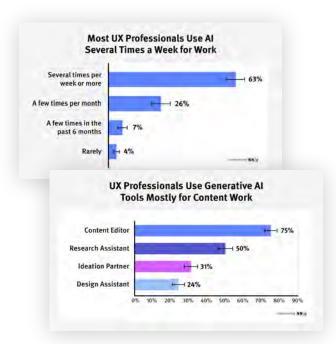


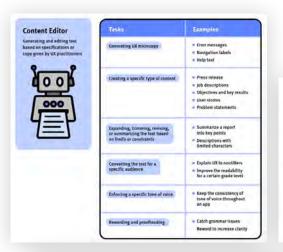


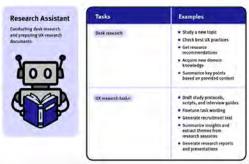


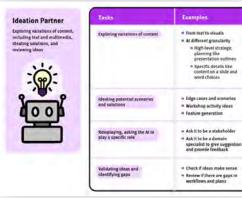
NN/g Nielsen Norman Group

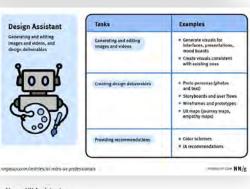
Al as a UX Assistant



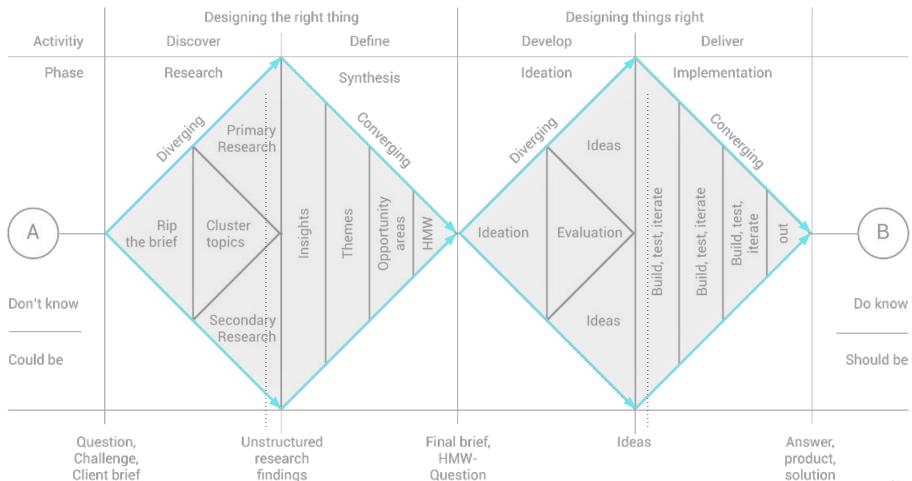


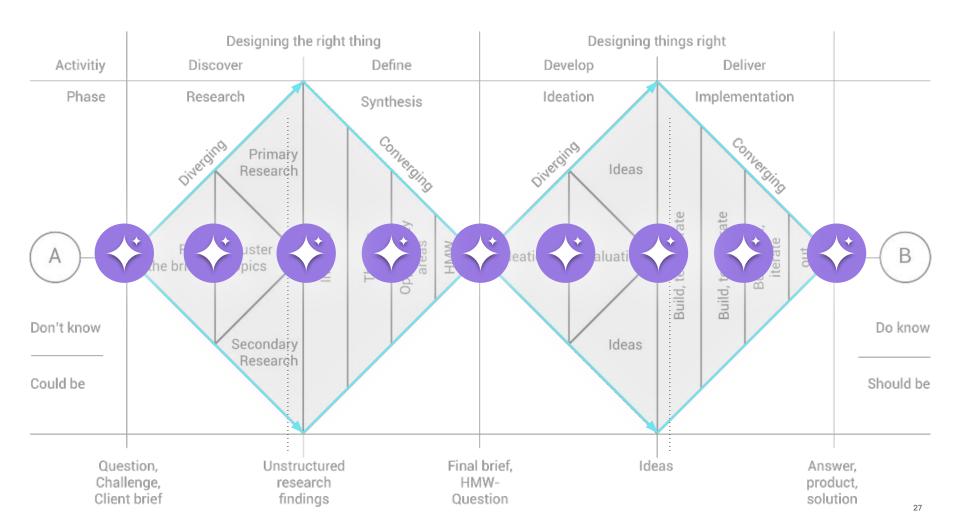












Answer, product,

28

	Designing the right thing		Designing things right	
Activitiy	Discover	Define	Develop	Deliver
Phase	RESEARCH (Discover)			*
	1. User Interv	views: Automated executio	n, transcription & translation	/ Sentiment



Don't know

Could be

- User Interviews: Automated execution, transcription & translation / Sentiment analysis / Pattern recognition / Follow-up question suggestions.
- 2. **Surveys & Questionnaires**: Dynamic questionnaire adaptation / Real-time data analysis / Predictive analytics / NLP for open-text responses
- 3. **Competitive Analysis**: Al-driven market research / Automated competitor UX analysis / Sentiment analysis on competitor reviews / Predictive modeling
- 4. **Usability Testing**: Real-time user tracking / Automated user behavior analysis / Predictive analytics for feature success / Sentiment analysis / Behavioral pattern recognition
- 5. **Analytics Review**: Real-time performance tracking / Al-driven user segmentation / Predictive analytics / Automated insights generation
- 6. **Literature Review**: Al-driven literature recommendation / Sentiment analysis on reviews / Topic clustering / Automated summary generation.



Do know

Should be

Question, Challenge, Client brief

research findings HMW-Question roduct, olution

	D€	esigning the right thing	Designing things right	
Activitiy	Discove	Define	Develop	Deliver
Phase	SYNTH	IESIS (Define)		*
		ffinity Mapping: Al-driven clustering uggestive tagging	/ Topic modeling / Real-time	updates /
		ersona Development: Data-driven predictive analytics / NLP for qualitative	· ·	c updates /
(A)		roblem Statement: Al-assisted problem ideation / Hypothesis testing (HMW)	•	/ Data-backed
		purney Mapping : Automated touchpredictive modeling / Real-time journe		l journey tracking /
Don't know		ser Flows: Al-driven flow optimizationalytics / Real-time data incorporation	•	alysis / Predictive
Could be		euristic Evaluation: Automated heunprovements / Real-time evaluation u		
	7. S	WOT Analysis: Real-time performan	ce tracking / Al-driven user s	segmentation /

HMW-

Predictive analytics / Automated insights generation

research

findings

Question,

Client brief

Answer, product, solution Do know

	Designing the right thing		Designing things right	
Activitiy	Discover	Define	Develop	Delive
Phase	IDEATION (Develop)			
		t ing : Al-assisted idea genera nalysis for collaboration / Id	•	•



Don't know

Could be

 Storyboarding: Al-driven narrative generation / Real-time storyboard optimizations / Automated consistency checks / Sentiment analysis for user emotional journey

Wireframing: Layout generation (text2code, scribble2code) / User flow analysis /

5. **A/B Testing**: Real-time data tracking / Automated result analysis / Predictive modeling for test outcomes / Sentiment analysis for qualitative feedback

Real-time design adaptations / Automated accessibility checks

6. **High-fidelity Mockups**: Al-driven design improvement suggestions / Real-time user interaction simulations / Predictive analytics for design elements / Automated color or Font scheme suggestions



Do know

Should be

Question, Challenge, Client brief

research findings HMW-Question oduct,

	Designing the right thing		Designing things right	
Activitiy	Discover	Define	Develop	Deliver
Phase	IMPLEMENTATION (Deliver)		*	
	Usability Testing: Real-time user tracking / Automated behavior analysis / Predictive analytics / Sentiment analysis			

Consistency checks / Al-driven project management



Don't know

Could be

B. **Performance Analytics**: Real-time tracking / User segmentation / Predictive analytics / Performance improvement suggestions

Development Hand-off: Code generation / Real-time collaborative editing /

- 4. **Iterative Improvement**: Change impact analysis / Real-time user feedback / Predictive modeling / Automated A/B/(Z) testing
- 5. **Quality Assurance**: Automated test scenarios / Real-time bug tracking / Predictive modeling for bug occurrences / Al-driven performance benchmarking
- 6. **Documentation**: Al-assisted content generation / Real-time document updates / Automated version control / Sentiment analysis for user feedback



Do know

Should be

Question, Challenge, Client brief

research findings HMW-Question

Fazit

Designers must leverage AI analytics to make informed and proactive decisions. Understanding their audience and prioritizing critical information will enable them to create excellent designs.

- Al will change the creative process
 by making it more efficient and effective.
- Al will help creaters to generate ideas more quickly and to evaluate and revise them more effectively.
- Al will also help creators to better understand their audiences and to tailor their content to meet their needs.

How to leverage Al for your work



*Not

Yeah, I know I should use the other terms like Machine learning or Deep learning instead of AI, but you know... I won't

How to leverage AI for your work

Get early access for Al-tools; Sign newsletters & podcasts; Network / Learn Attend conferences; Follow Al-leaders for free on social media. Find a side / fun project; be not afraid to fail; Split teams into Al Play / Fail & non-AI to compare; Try humor, Use metaphors. Stay alert; Have a slack ear for fears of others; Be aware of Think / Critic negative aspects, such as: biases, censorship, plagiarism, fraud, injustice & environmental impact. Think about where and how to implement into existing **Explore** / *Implement* processes; start small and focus & succeed. Share your findings; Communicate your insights, internally & Tell / Share externally; Install an Al ambassador in your team/company.

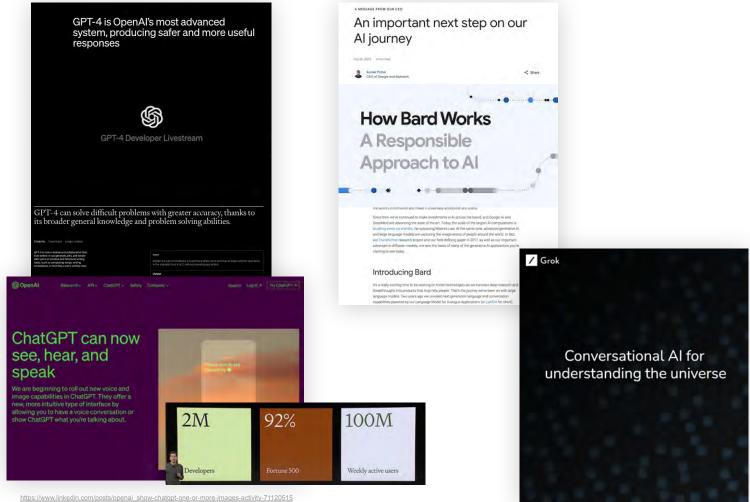
«As generative AI is becoming a commodity, it is clear that the problem is migrating from how to create to what to create. In other words what strategy is needed to standout in a sea of Al outputs.»



Salmane Saadani
Chief Product Officer Storyroom
Using AI to turn Data into Communication
& Branding Strategy



AI Assists



nttps://www.iinkedin.com/posts/openal_snow-chatqpt-one-or-more-images-activity-/ 97404225537-P 4E?utm_source=share&utm_medium=member_desktop

Three key takeaways from today's OpenAI announcements

The hyper quick cheat sheet to todays first ever developer conference hosted by Open AI the company behind ChatGPT. Here is a link to the full event https://www.youtube.com/watch?v=U9mJuUkhUzk.



A new model

A new model called "Turbo" was introduced - faster, cheaper (2-3 times cheaper) and more multimodality (read: voice, text, code input and output). Commercial use cases are now more feasible then before with fine tuning and custom model options.



A new Ecosystem

Open Al introduced new ecosystem of apps assistances - they call them GPTs. Customised Al assistance bots that remember the context of their task and can be trained on custom data. They can be used privately (no code needed to build them) or "published" in their store (new creator revenue share program coming up).



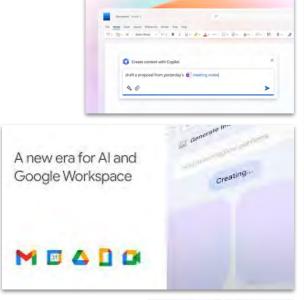
THOUGHTS &



A new way to build API's

A new era of development and User Interface design is born. Assistants API - allows developers to build API's supporting multimodal UI development on the go - with natural language input. Manyone

AI Assists









Text -2-Text



sudo write



FAG Pricing Log III



Sudowrite is the non-judgmental, always-there-to-read-one-more-draft, never-runs-out-of-ideas-even-at-3AM, AI writing partner you always wanted.

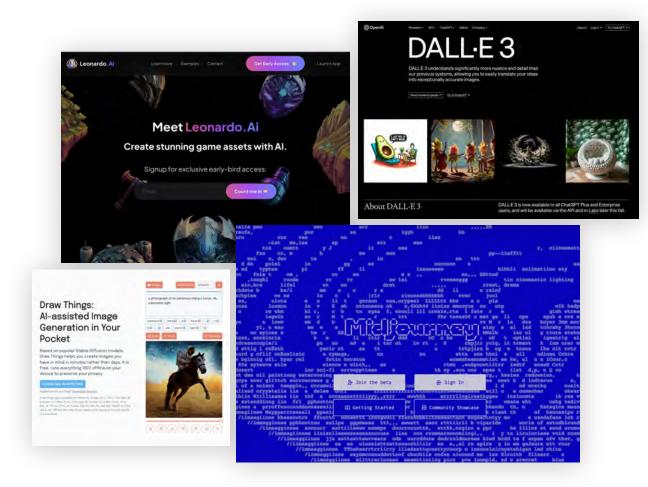


Text/Video-2-Speaker





Text-2-Image



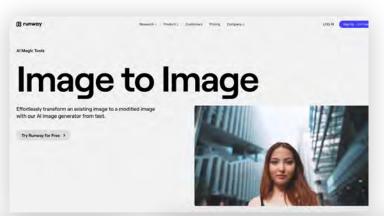


Image -2-Image





text/image/video -2-video



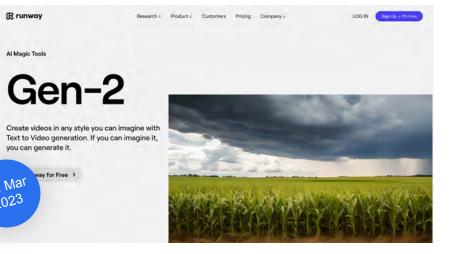
R runway

Al Magic Tools

you can generate it.

21. Mar 2023

way for Free >



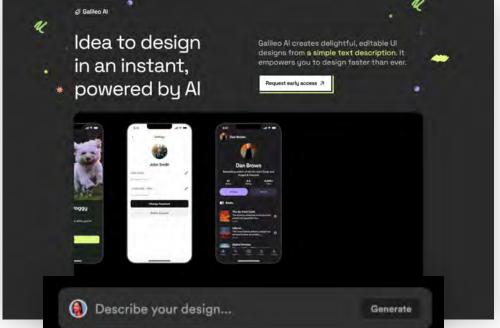
U Magazine Gen-2

Text to Image Image to Image Infinite Image Inpainting

Frame Interpolation Custom Al Training

Text -2-UI

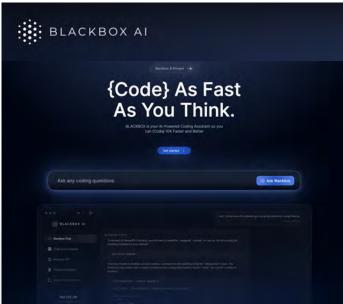




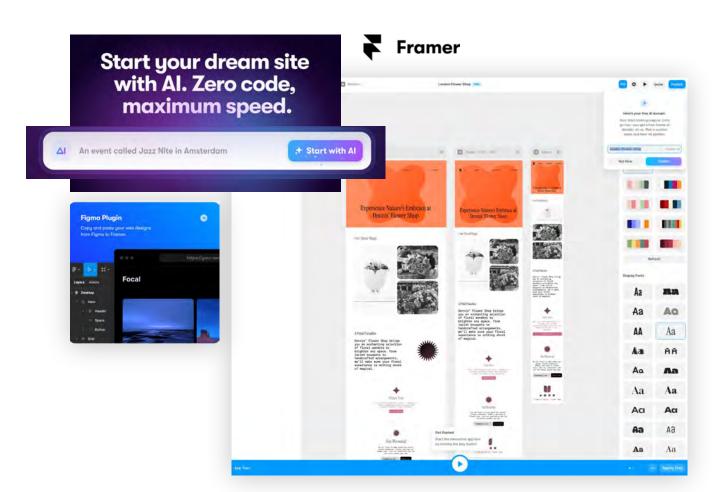
Text-2-Code



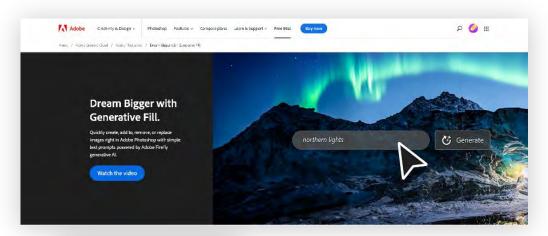




Text-2-Website



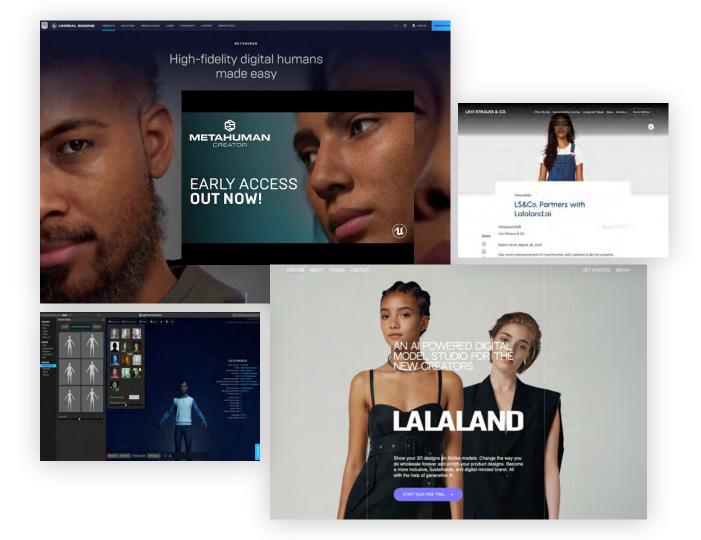
Text-2-Generative Fill







Code-2human



Let's be lazy and let the Al run the job...?

Experimental Run Throughs

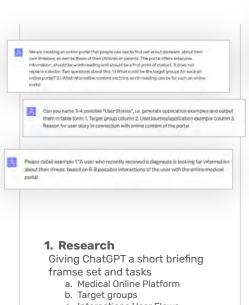
From Desk Research & UX to Visualization & Communication





Prototypical Use Case 1

Merging UX and Design to Hyper-Personalize Online Ads with Al tools



- c. Interactions User Flows
- d. Create User Stories



2. Create Personas

Create Profile insights and Visualization

- a. Personal information
- b. Pains, Gains Jobs-2b-done
- c. Image prompting
- d. Prompt optimization



and Key Messages

- a. Headline, Copy variations
- b. Prompt generating
- c. Image generating
- d. Al animation of Visual



Create hyper-personalized

variations of Key Visual/Text

a. Using prompt variations b. Vary Headlines/Copy

according to viszual

Blog post https://netgen.io/blog/ai-creativity-2-merging-ux-and-design-to-personalize-online-ads-with-ai

Prototypical Use Case 2.1

Rapid prototyping - from Scribble to HTML/CSS via ChatGPT to WYSIWYG Website



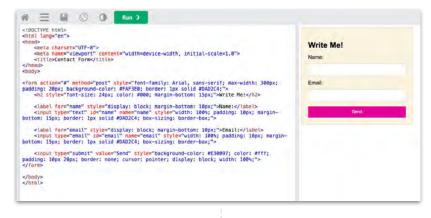
1. A photo of a simple scribble on a Post-It for a contact form

- Headline
- Form Fields
- Button



2. Upload to ChatGPT and ask for Code

- HTML
- CSS



3. Copy/paste HTML code into HTML editor tool

- HTML
- CSS

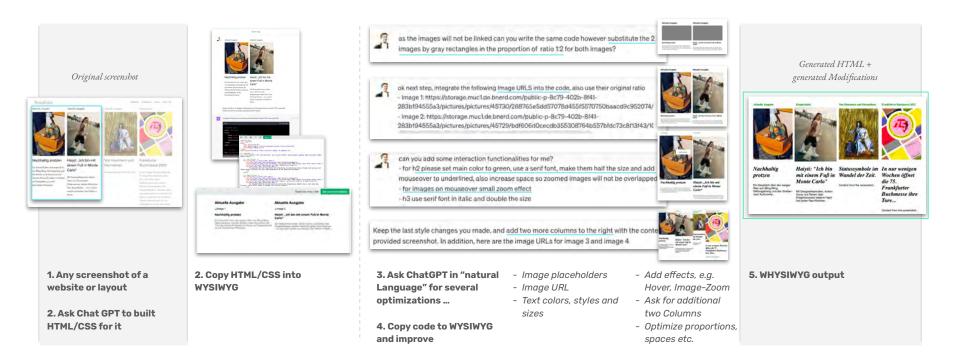
4. WYSIWYG output

- UI layout
- rough prototype

Linkedin Post: https://www.linkedin.com/posts/dennis-oswald-4a260222_chatqpt-activity-7121047070722912256-MFs7?utm_source=share&utm_medium=member_desktop

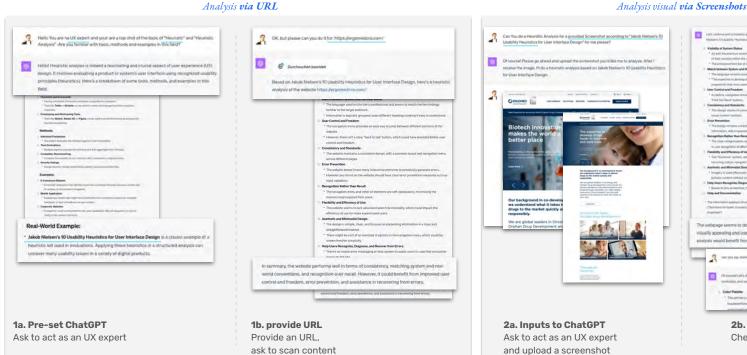
Prototypical Use Case 2.2

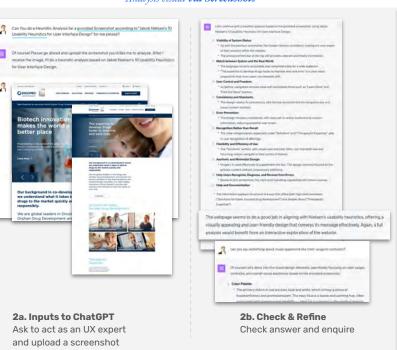
Rapid prototyping - from Layout/Screenshot to HTML/CSS via ChatGPT to WYSIWYG Website



Prototypical Use Case 3

Heuristic website analytics by ChatGPT (according to Jakob Nielsen's 10 Usability Heuristics for User Interface Design)









Here's a demo of the gpt-4-vision API that I built in @bubble in 30 min.

It takes a URL, converts it to an image, and sends it through the Vision API to respond with custom landing page optimization suggestions.



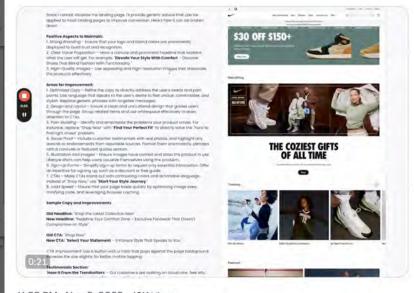
11:55 PM · Nov 6, 2023 · 12K Views





Here's a demo of the gpt-4-vision API that I built in @bubble in 30 min.

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11:55 PM · Nov 6, 2023 · **12K** Views

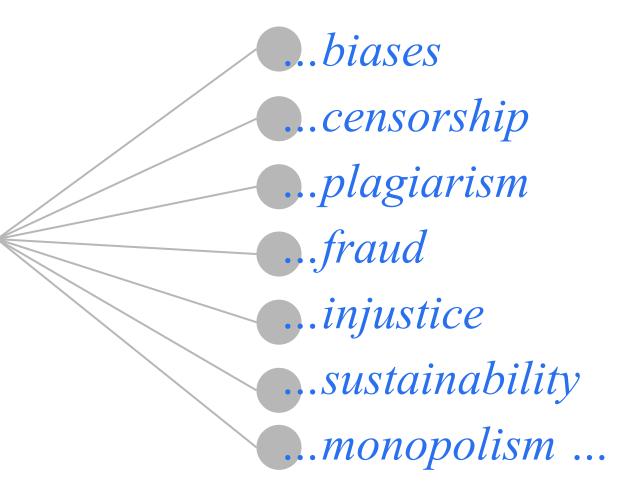
...

«With great power comes great responsibility.»



Uncle BenSpiderman Movie

AI issues



Reality is broken!







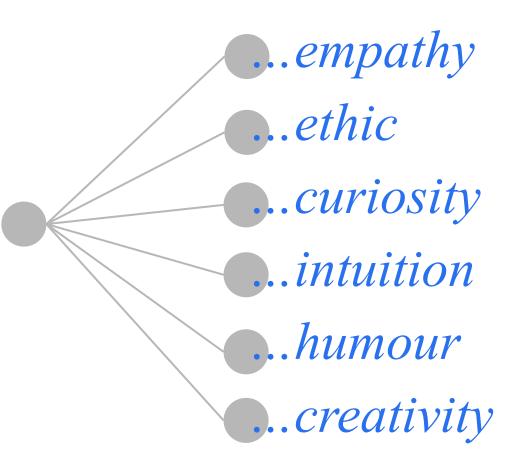
https://www.linkedin.com/posts/ionfinger_testing-out-heygen-translation-on-french-activit y-7106843190443327488-v7Ci?utm_source=share&utm_medium=member_desktop



https://x.com/nickfloats/status/1714951840595370311?s=20

I would say...

Let's focus on human strengths



The Key (UX) Question for the Future:

How to create **trust** in times of AI?

In times where "reality is broken", you can not longer rely on:

Text, Sound, Voice, Images, Video?



Netgen

Your generator of change for digital experiences.



Technology & development



Digital strategy & consulting



Design & user experience



Customer success & growth





Let's stay in contact



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