

AI Newsletter

ISSUE NO. 1 | MAY 2023

Business

The CEO's Guide
to the Generative
AI Revolution

Ethics

EU AI Act to Target
Open Source

Research

DragGAN:
Interactive GAN
Manipulation on
Image Manifold

Learning Hub

ChatGPT Prompt
Engineering for
Developers

In The Open

StarCoder:
The Ultimate Code
LLM Powerhouse

Public Figure

Prof. Geoffrey Hinton

MoroccoAI Conference Videos

Towards a Promising National
AI Strategy for Morocco



Opening Letter

Greetings MoroccoAI Community,

We are delighted to present this new edition of MoroccoAI Newsletter, a concise and captivating source of news summaries covering the forefront of the AI landscape. The newsletter is designed to keep you well-informed and up-to-date with the most significant advancements in the field, catering to AI professionals, researchers, and students.

Our team has curated a collection of noteworthy news pieces, carefully selected for their credibility and value. From groundbreaking research breakthroughs to thought-provoking reports on AI ethics and impactful business updates, the newsletter covers a diverse range of topics that we hope will captivate your interest and deepen your understanding.

MoroccoAI is a non-profit organization committed to fostering AI education and excellence in research in Morocco. We achieve this by promoting dynamic collaborations within our community and strategic partnerships with renowned institutions and industries. MoroccoAI regularly hosts a variety of engaging events, including virtual and in-person, including AI Webinars, Meetups, Workshops, and Conferences. We are immensely grateful for the support of our incredible community, which has grown to over 20,000 subscribers across our social media platforms. It is your enthusiasm and dedication that fuel our drive to lead the future of AI in Morocco and beyond.

We invite you to follow us on LinkedIn to stay connected and engaged. Share this newsletter with your peers, colleagues, and anyone passionate about the exciting world of AI.

Enjoy your read!



Content

Opening Letter

02

Ethics &
Responsible AI

11

AI Around
The World

Learning Hub

12

Business

05

Public Figure

13

Research

07

MoroccoAI
Highlights


In the Open

09

MoroccoAI
Conference

15





AI Around The World



Business

Anthropic introducing 100K context windows for Claude



Anthropic, founded by ex-OpenAI employees, expanded Claude's context window from 9K to 100K tokens, corresponding to around 75,000 words. Businesses can now analyze and retrieve information from hundreds of pages with Claude, and conversations can go on for hours or even days. The 100K context window feature is accessible via Claude's API.

[read more](#)

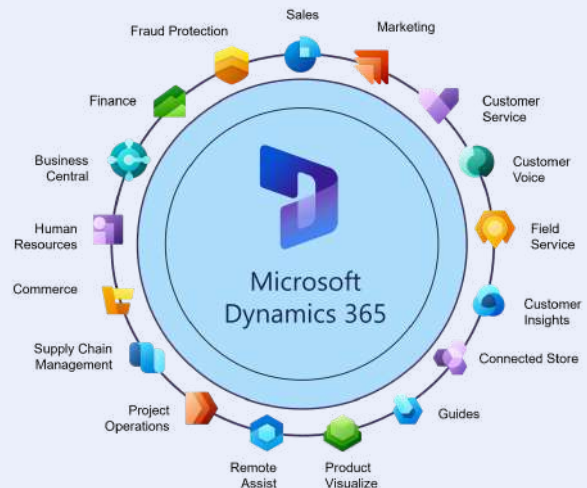
Anthropic - May 11th

Microsoft reinventing productivity with Copilot

Microsoft is integrating a new AI-powered Copilot for its Microsoft 365 apps and services, designed to help organizations drive business outcomes, improve operational efficiency, and create exceptional customer experiences.

[read more](#)

Microsoft - May 9th



PwC \$1 billion investment to scale its AI capabilities



PwC to invest \$1 billion over the next three years to expand its AI offerings. This follows a new strategic alliance with an AI Startup, called Harvey, to build on PwC's ability to bring human-led and tech-enabled solutions to clients. In tandem, PwC US will invest in upskilling its 65,000 people on AI tools and capabilities.

[read more](#)

PwC - April 26, 2023



OCP and UM6P invest \$200 Million in Bidra Ventures



Bidra Innovation Ventures announced commitment of \$200M by UM6P and OCP Group to expand its investment scope to include innovations in energy, water, mining and agriculture for Africa and beyond. The VC firm is an active investor in AI and Robotics agricultural startups like Niqo Robotics, which focuses on AI-powered sustainable spot spraying technology.

[read more](#)

Business Wire - April 5th

300 million jobs could be lost globally to AI automation

Goldman Sachs predicts that AI has the potential to significantly disrupt labor markets, exposing 300 million jobs globally to automation, but it can also boost labor productivity over the coming decades, leading to substantial economic growth.



[read more](#)

Goldman Sachs - March 26th

The CEO's guide to the generative AI revolution



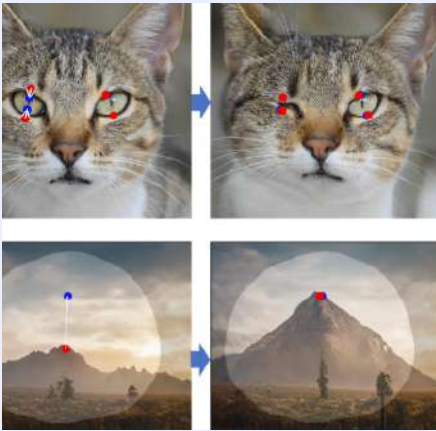
Immersed in the transformative era of the Generative AI revolution, CEOs should identify their company's "golden" use cases, which could offer genuine competitive advantage. BCG crafted a report laying out strategic options for CEOs keen on harnessing the potential of generative AI to unlock hidden value and boost efficiency across their enterprises.

[read more](#)

BCG - March 7th

Research

Interactive GAN manipulation on image manifold



DragGAN controls GANs in image synthesis. It allows to interactively manipulate images by "dragging" points to specific positions. It provides precise control over pose, shape, expression, and layout of objects, resulting in realistic outputs. DragGAN outperforms previous approaches in image manipulation and point tracking tasks. It can even manipulate real images through GAN inversion.

[read more](#)

Hugging Face - May. 18th

Google announced PaLM 2, its next-gen LLM

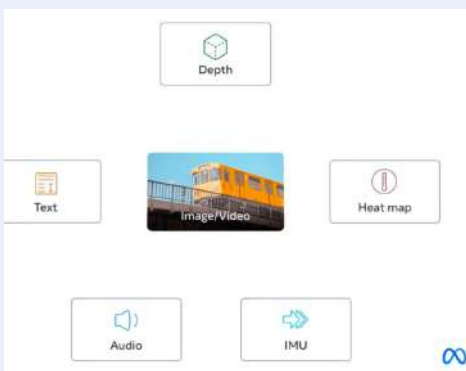
Google announced its latest large language model PaLM 2 with improved multilingual, reasoning and coding capabilities. The system is available in four sizes and has been fine-tuned on domain-specific data to perform certain tasks for enterprise customers. It is already being used to power Google Workspace apps and products, including Bard.



[read more](#)

Google- May 10th

Meta AI model understands multi-sensory content



ImageBind uses images to connect different modalities and learn a single joint embedding space without needing paired data for every combination of modalities. The approach brings machines one step closer to humans' ability to learn simultaneously, holistically, and directly from many different forms of information, without the need for explicit supervision.

[read more](#)

Meta AI - May. 9th



OP3-Soccer: Autonomous soccer playing robotic system



Deepmind presents OP3-Soccer, a robotic system designed for autonomous soccer playing. The system combines computer vision, motion planning, and control algorithms to enable the robot to perceive the environment, make decisions, and execute complex actions on the soccer field.

[read more](#)

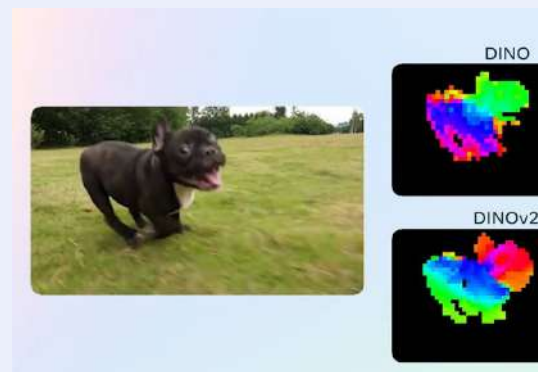
Deepmind - April. 26th

Computer vision models with self-supervised learning

Meta AI open-sourced DINOv2, the first self-supervised learning method to build high-performance computer vision models. It can be applied to a wide variety of applications and capable of achieving high-quality visual features without the need for fine-tuning.

[read more](#)

Meta AI - April. 17th



Segment Anything: Advancing instance segmentation



Segment Anything Model (SAM) can "cut out" any object, in any image, with a single click. SAM can be used to generate high quality masks for all objects in an image. It is a promptable segmentation system with zero-shot generalization to unfamiliar objects and images. Authors released their open source dataset of 11MM images and over 1 billion masks, the largest mask corpus to date.

[read more](#)

Meta AI - April. 5th

In The Open

StarCoder: The ultimate code LLM powerhouse



StarCoder is a powerful LLM for Code trained on more than 80 different programming languages as well as text extracted from GitHub issues and commits and from notebooks. It outperforms other open Code LLMs on several programming benchmarks. Designed to assist programmers, StarCoder facilitates the creation of high-quality, efficient code in shorter time periods.

[read more](#)

Huggingface - May. 4th

Effortless fine-tuning of LLMs with H2O LLM Studio

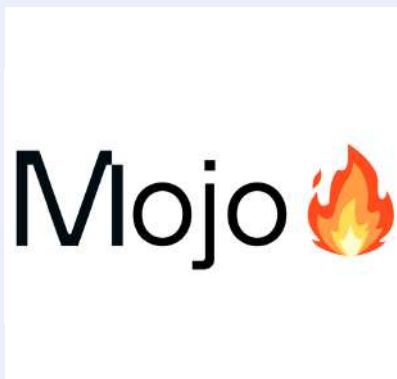
Large Language Models (LLMs) have revolutionized NLP, but fine-tuning them for specific tasks can be complex. H2O LLM Studio simplifies the process with a user-friendly GUI, advanced metrics, and easy model sharing, empowering NLP practitioners without coding experience to customize models effortlessly.



[read more](#)

H2O.ai - May. 1st

Mojo — a new programming language



A new programming language has emerged. It tackles the speed limitations of Python, offering unparalleled performance that can reshape the AI field. Mojo enables developers to write fast, small and easily-deployed applications that take advantage of all available cores and accelerators. It was designed with full compatibility with Python ecosystem.

[read more](#)

Modular - April 22th



Auto-GPT: The rise of autonomous agents



Auto-GPT is a tool that transforms ChatGPT into an autonomous AI assistant, handling tasks and projects without need for user prompts. It is able to carry out more complex multi-step procedures than existing LLM-powered applications by creating its own prompts and feeding them back to itself, creating a loop. Auto-GPT is capable of browsing the internet and incorporating relevant information into its computations and results.

[read more](#)

Github - April 22th

Stability AI reveals StableLM and SDXL

Stability AI introduced two innovative AI models, StableLM, which purports to achieve similar performance to OpenAI's benchmark GPT-3 model while using far fewer parameters, and Stable Diffusion XL, its latest text-to-image. Stable Diffusion kickstarted an era of rapid development in image-synthesis technology, and its move into language models could inspire similar results.



[read more](#)

Stability.ai - April. 19th

Open Assistant: Empowering language innovation for all



OpenAssistant is a chat-based assistant that understands tasks, can interact with third-party systems, and retrieve information dynamically. In an effort to democratize research on large-scale alignment, they released a conversational dataset comprising 160K messages in 35 languages, a remarkable worldwide crowd-sourcing effort.

[read more](#)

Github - April 15th

Ethics & Responsible AI

EU AI Act to target Open-Source



The EU's Amended AI Act aims to regulate the use and distribution of AI systems. The Act mandates extensive licensing requirements and expensive risk testing on AI projects. Open-source developers and software distributors could face substantial financial penalties if unlicensed generative models become accessible in Europe. Critics argue that the Act could encourage unsafe AI practices.

[read more](#)

europarl - May. 16th

A Policymaker's Guide to Foundation Models

This IBM article advises against overestimating the capabilities of foundation models, spotlighting the inherent risks tied to training data, outputs, and governance. It underscores the diverse potential for harm that can arise from various AI applications. The article suggests that policymakers can best address these concerns by implementing risk-based regulatory obligations and an AI policy framework tailored towards those deploying AI systems.



[read more](#)

IBM - May. 1st

How can we build human values into AI?



There is no consensus on a single set of human values or preferences to govern AI. DeepMind research proposes that the impartial nature of the Veil of Ignorance may provide a starting point for the selection of principles with which to align AI with our diverse human values and opinions.

[read more](#)

ScienceDirect- April. 24th

Learning Hub

Stanford Institute released its 2023 AI Index Report



[Learn More](#)

The AI Index tracks and evaluates AI progress through a wide range of perspectives, looking at trends in research and development, technical performance, ethics, economics, policy, public opinion, and education. This year's report included new analysis on foundation models and noted how AI industry is advancing over academia.

Practical Deep Learning for Coders at Fast.ai

Fast.ai is an online platform and community that offers practical, coding-focused courses in deep learning. The courses are designed for beginners while also offering advanced material for experienced learners. Its emphasis on hands-on, applied learning equips students with the skills and knowledge to undertake real-world projects.



[Learn More](#)

ChatGPT Prompt Engineering for Developers



[Learn More](#)

A new free course on Prompt Engineering is offered by Deeplearning.ai in collaboration with OpenAI. It outlines best practices in prompt engineering, which is the art of skillfully communicating with an LLM. The course gives participants hands-on practice with the OpenAI API and it is designed to be accessible to everyone with a fundamental grasp of Python.



Public Figure

Prof. Geoffrey Everest Hinton

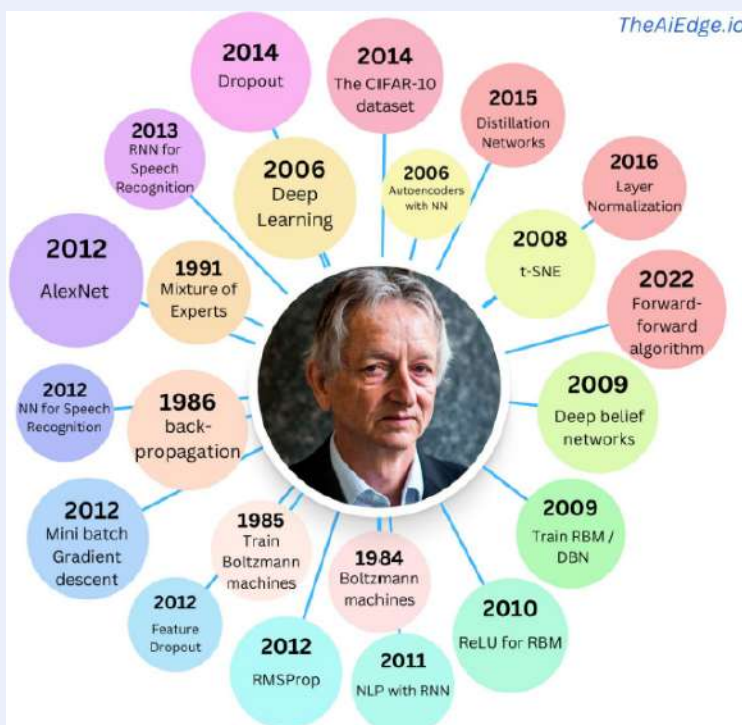
Geoffrey Hinton, a distinguished British-Canadian cognitive psychologist and computer scientist, is an Emeritus Professor at the University of Toronto. He has been honored with numerous accolades, including the prestigious ACM Turing Award in 2018, widely regarded as the Nobel Prize of computing.

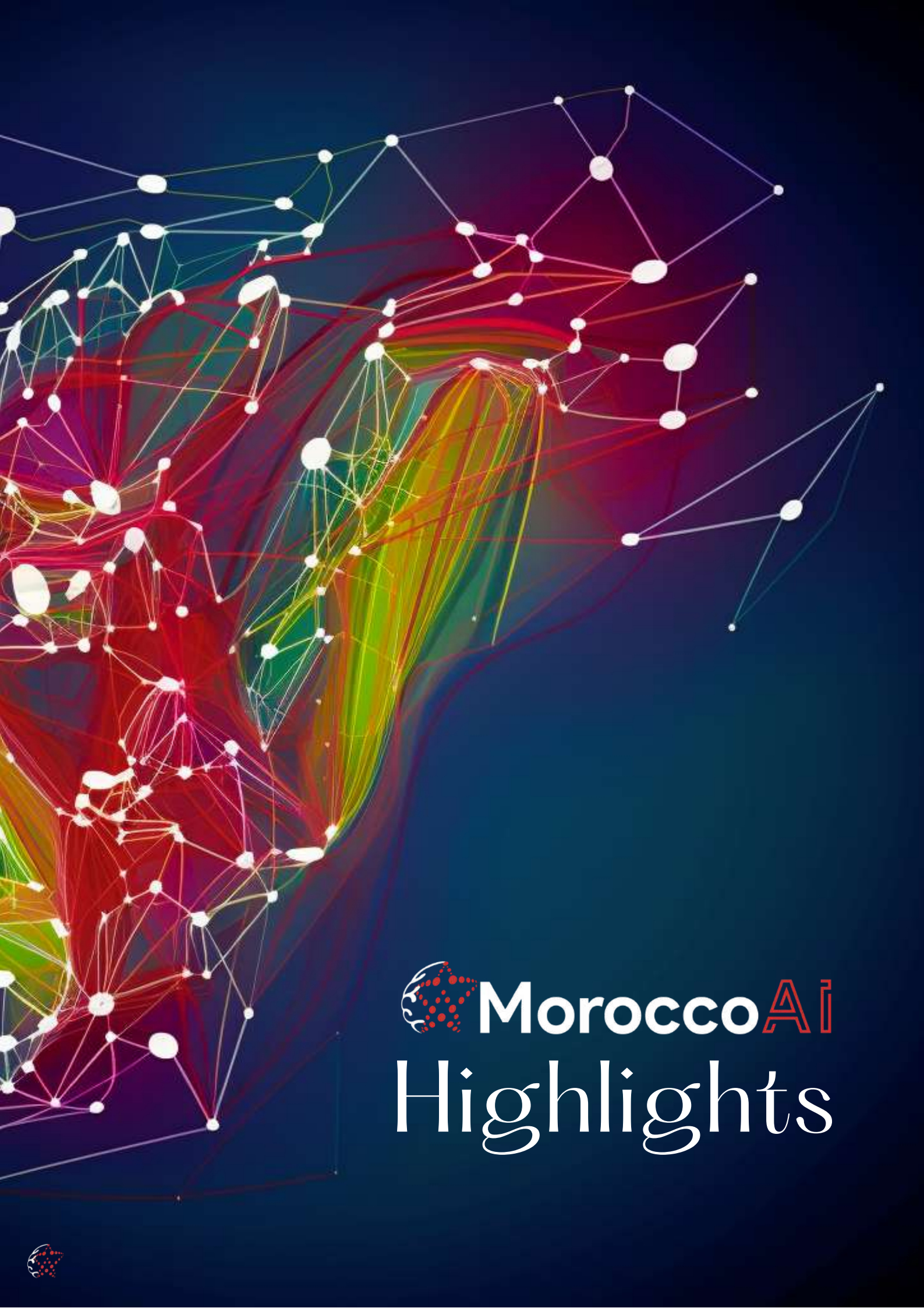
Hinton is recognized as the Godfather of Deep Learning for his pioneering work on algorithms that enable artificial Neural Networks (NNs) to learn distributed representations. In the 1980s, Hinton demonstrated the immense potential of backpropagation, a central mechanism by which NNs learn and forms the bedrock of this technology today. Hinton has made significant other contributions to the field which have paved the way for current AI systems.



At the latest MoroccoAI conference, Hinton presented a new learning algorithm for neural networks called the "forward-forward algorithm", inspired by our knowledge of neural activations in the brain.

Earlier this month, Hinton resigned from Google to openly discuss the risks associated with AI. Since then, he has publicly addressed the potential of AI to both benefit and harm society. He also cautioned that autonomous AI systems may pose a serious threat to humanity and that the kind of intelligence we're developing is very different from our intelligence.





Morocco*Ai* Highlights



Conference Highlights



“

AI should not be restricted to academic elite. It should be accessible to all citizens

H.E. | Dr. Aawatif Hayar

”

[WATCH NOW](#)

“

Research is about effort.. It is no coincidence. You have to experiment. You have to work hard

Prof. Rachid Guerraoui

”

[WATCH NOW](#)

“

AI is changing the way humans behave and we would like this change to happen in the good way for what we value in our society

Prof. Malik Ghallab

”

[WATCH NOW](#)

“

Data scientists and factory leads have different backgrounds. Developing a common language is key to succeed in building an AI bridge

Dr. Hicham Zmarrou

”

[WATCH NOW](#)

“

We often overlook the crucial role of computing platforms in deploying AI at large and at edge

Prof. Said Hamdioui

”

[WATCH NOW](#)





“

Once you get close enough..
suddenly, all sorts of things
start making sense

Prof. Geoffrey Hinton

”

WATCH NOW



“

In the future, AI will be distributed,
and we will need a network that
interconnects all the resulting
systems

Prof. Merouane Debbah

”

WATCH NOW



“

Wherever there is data being
collected, there lies a significant
opportunity for AI to address various
challenges and issues

Dr. Bouchra Bouqata

”

WATCH NOW



“

When developing AI strategies, it is
important to take into account both
the potential of positive and
negative climate impacts of AI

Dr. Priya L. Donti

”

WATCH NOW



“

AI development in Morocco
cannot be dissociated from
a global strategy on
science and technology

Prof. Mohamed Najim

”

WATCH NOW

CURRENT AVAILABLE OPENINGS AT MOROCCOAI

Join Us Today!



Social Media &
Community Engagement



AI Newsletter



Creative Design



Website Development



Study Groups &
Journal Club



Apply now !



AI Meetup



Webinars



Conferences

Promoting excellence in AI education & research
and connecting today's and tomorrow's AI leaders

