

### **NEWSLETTER #4**

# European Lighthouse of Al for Sustainability

**ELIAS** 

# From Research to Impact: Sustainable AI in Action

This edition of the ELIAS Newsletter highlights the transformative power of AI when research, innovation, and societal impact intersect. From pioneering sustainable solutions to nurturing the next generation of AI talent, our community continues to advance science while keeping ethics, inclusivity, and responsibility at the forefront.

Our focus this edition is on impactful, sustainable Al in action, showcasing progress that inspires, connects, and equips the community for the next wave of discovery.

Europe's Al scene has been vibrant this spring and summer, from workshops and challenges to collaborative forums bringing together researchers, innovators, and policymakers. Here's a closer look at what has been accomplished:.

## In this issue, you'll discover:

How interdisciplinary collaborations are shaping AI that is transparent, trustworthy, and aligned with societal needs.

Stories of breakthroughs and innovations that are redefining Al capabilities—from sustainability challenges to emerging technologies.

Opportunities to engage with Europe's AI ecosystem, whether through research programs, startup accelerators, or global challenges.

### **HIGHLIGHTS**











### **ELIAS, ELLIOT & ELSA Theme Development Workshop on Foundation Models**

10 July, 2025 | Thessaloniki, Greece

ELIAS, together with the ELLIOT & ELSA projects co-organised a successful Theme Development Workshop (TDW) on Foundation Models. Hosted by the Centre for Research and Technology Hellas (CERTH), the hybrid event brought together over 200 participants, including AI researchers, industry experts, and students.

The workshop focused on Europe's growing leadership in developing open, ethical, and multilingual foundation models—large-scale AI systems like GPT-4 but with a strong emphasis on transparency, inclusion, and sovereignty. Key sessions covered technical advances in model training, safety challenges, and real-world applications across robotics, healthcare, and video understanding. ELIAS and its partners highlighted the importance of European collaboration, public computing infrastructure, and innovative methods such as synthetic data generation to democratise AI development. The event reinforced Europe's commitment to shaping a safe and sustainable AI future, showcasing projects like NeoBabel, OpenCLIP, and TabPFN.

This TDW exemplifies Europe's active role in advancing AI that aligns with its values, fostering open science, and strengthening cross-sector partnerships. Recap article is coming soon..





### **ELIAS & IRCAI at GITEX Europe**

21-23 May, 2025 | Berlin, Germany

Together with the IRCAI, International Research Centre on Artificial Intelligence under the auspices of UNESCO, ELIAS participated in the inaugural GITEX Europe in Berlin, one of Europe's largest gatherings of innovators, investors, policymakers, and researchers in digital transformation. ELIAS showcased its work on Responsible AI and Sustainable Development Goals (SDGs) through a series of targeted activities:

- Workshop "Responsible AI in Practice" on bias testing, data privacy, and EU AI compliance using ELIAS tools.
- AI & SDG11 Challenge, where six startups presented AI solutions for sustainable urban development.
- Panel "Transforming Urban Futures", highlighting Al's role in inclusive, future-proof cities.

The event highlighted ELIAS' commitment to responsible, regulation-aligned AI for sustainable and democratic innovation. Read more



### Theme Development Workshop on Sustainability & Al

#### 7 March 2025 | Bucharest, Romania

ELIAS' first Theme Development Workshop (TDW) on Sustainability and AI, brought together 50+ participants to explore Al's role in environmental monitoring, digital democracy, and ethical technology development. The workshop opened with a session on the regulatory and ethical aspects of AI, emphasising accountability, transparency, and inclusive governance to ensure AI benefits both people and the planet. Discussions explored AI for a Sustainable Planet (e.g., UAV environmental monitoring), Al for a Sustainable Society (transparency, fairness, digital democracy), and Trustworthy AI for Individuals (ethical development and model safety).

The event also highlighted young researchers, interdisciplinary collaboration, and diversity, alongside sessions on entrepreneurship and technology transfer featuring the <u>ELIAS Alliance</u> and <u>Al Launchpad</u>, supporting startups and strengthening academia-industry links.

The discussions and insights from the TDW will inform the forthcoming Strategic Research Agenda on Sustainable AI,, guiding Europe's approach to ethical and sustainable AI development. Read more

# Other Recent Highlights:

From March 18–21, the <u>ELLIS Winter</u> <u>School on Foundation Models</u>

Amsterdam gathered 200 researchers from 100+ institutions to explore foundation models, generative AI, and multimodal learning — read the full recap here.

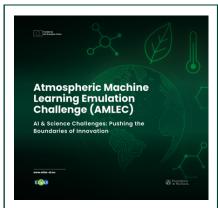
On June 4, the <u>ELLIS Workshop on NLP and Speech Recognition</u> highlighted cutting-edge developments in language and voice technologies.

On July 15, ELIAS joined the dAIEDGE

— a Network of Excellence for
distributed AI at the edge event
Driving Business Models and
Solutions with Edge AI, sharing
insights and presenting the latest
ELIAS Open Call along with ongoing
activities of the ELIAS Alliance.

These events showcase Europe's leadership in sustainable AI and provide opportunities to connect, collaborate, and innovate.

### **SUCCESS STORIES**



★Atmospheric Machine Learning Emulation Challenge (AMLEC)
★

In the frame of ELIAS, the **AMLEC** has concluded with outstanding contributions from the AI and climate science communities. Organised by the University of Valencia's Image and Signal Processing Group, **AMLEC** invited participants worldwide to develop machine learning-based emulators for Radiative Transfer Models (RTMs) – a cornerstone of Earth observation and climate research.

¥ 1st place: Dr Jasdeep Singh (Khalifa University) ₹ 2nd place: Jorge Vicent Servera (University of Valencia) ¥ 3rd place: Romain

Poirier (Magellium, France)

The results will be

The results will be showcased in a special session at <u>ECML PKDD 2025</u> (Porto, 16 September 2025), featuring an RTM overview and presentations from the top three participants.

★ELIAS Open Call Winners:
Al Solutions for a
Sustainable Future★

From over 200 proposals, ELIAS has selected four pioneering AI projects to tackle sustainability challenges across Europe.



The winners are: **LUCIA** (EWALA IT Services, Spain) – Energy-optimised smart buildinas: PINNSSHS (Valence Technologies, Belgium) -Physics-informed selfhealing polymers; TENSORIA (Multiverse Computing SL, Spain) -Transparent, energyefficient cybersecurity; AI-REFRAME (Athens Technology Center, Greece) - Countering migration disinformation.

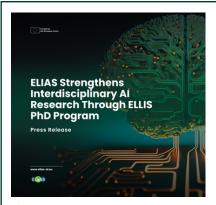
Each will receive up to €60,000 and ELIAS support to bring their solutions to life. Read more



\*Al Launchpad Celebrates Successful Completion of First Cohort\*

In May, the AI Launchpad brought together nine innovative AI startups from six leading European hubs for the closing event of its first program cohort. Hosted at DTU Skylab in Copenhagen, the two-day gathering featured startup demos, workshops, and networking sessions that highlighted the remarkable progress made by these teams in fields ranging from healthcare to AIdriven communications and cultural engagement.

Throughout the program, the startups refined their go-to-market strategies, explored new markets, and formed valuable partnerships across Europe's Al ecosystem. Building on this success, the Al Launchpad is now opening nominations for its second cohort. The program offers curated immersion visits to top AI hubs, access to a pan-European network of experts and entrepreneurs, and strategic connections with investors and corporates. Learn more



★ELIAS Strengthens
Interdisciplinary AI Research
Through ELLIS PhD Program
★

ELIAS is shaping the next generation of AI researchers by supporting the Interdisciplinary Track of the ELLIS PhD & Postdoc Program. This pioneering track pairs AI specialists with experts in fields such as biology, law, and climate science, combining technical excellence with societal impact through a unique dual-supervision model.

Among the first projects:
Kieran Didi (University of Oxford) is developing generative AI methods for biomolecular design in synthetic biology, while Sebastian Hoffmann (Max Planck Institute for Biogeochemistry) is creating WeGen-Land, the first Foundation Model for the Earth's land surface.

The program already spans 50+ leading institutions, drawing 1,479 applicants from 96 countries for the 2024 intake. With 38% of selected candidates joining ELIAS institutions and nearly a third identifying as female, the initiative is fostering diversity while building Europe's leadership in sustainable and responsible Al. Read more

### **☀**ELIAS Mobility Program**☀**

Advance your career in Europe with the ELIAS Mobility Program! Open to PhD students and postdocs, the program funds research stays up to 6 months in academia or 3 months in industry across the ELLIS and ELIAS networks.



Grants are available to
Europe-based researchers
collaborating within the
ELIAS/ELLIS networks. Mobility
funding also supports
attendance at diversity and
inclusion workshops that
promote women in machine
learning. Learn more



### **UPCOMING EVENTS**



<u>ELLIS Doctoral Symposium -</u> #EDS2025: Robust Al

25-29 August, 2025 | Warsaw, Poland

This week, the ELLIS Doctoral Symposium (EDS) returns for its fifth edition in Warsaw! With a focus on Robust AI, the event gathers PhD students, young researchers, and leading experts for an inspiring week of talks, poster sessions, and networking.

Expect a week full of keynote talks, poster sessions, workshops, and networking opportunities, all designed to foster collaboration and innovation in AI research.

Follow us to get updates and highlights from the symposium as well as postevent insights.

### How to be a (Startup-) CTO

8–10 September, 2025 | Potsdam Germany

The ELIAS Node Potsdam-HPI Engine, in collaboration with ELIAS, will host the "How to be a (Startup-) CTO" summer school at the Hasso Plattner Institute. This 3 ECTS course provides hands-on experience in tech strategy, leadership, DevOps, HR, and lean analytics—bridging the gap between technological expertise and the entrepreneurial role of a CTO.



\* Special for ELIAS participants: Spots are still available, and travel costs covered!

Apply by **September 5** via <u>program@engine.hpi.de</u>:

- ECTS participants: submit enrollment certificate, CV, 3–5 sentence motivation
- Non-ECTS participants: email only

Interested? Feel free to reach out to Programme Manager Anna Schnekker (Anna.Schnekker@hpi.de) or HPI ELIAS Coordinator Tristan Ricken (tristan.ricken@hpi.de).



### Save the Date: Al In Science Summit

3–4 November, 2025 | Copenhagen, Denmark

The ELIAS Alliance is proud to partner with the Al in Science Summit 2025, organised as part of the Danish Presidency of the European Council, to launch the Resource for Al Science in Europe (RAISE). This Summit will highlight Al's transformative role in advancing scientific discovery and explore how Europe can lead this change with a unique, collaborative approach.

**For registration** please refer to the following link: <a href="https://www.ais25.eu">www.ais25.eu</a>

Get Involved: Researchers are encouraged to contribute through posters, demos, and other scientific submissions—a fantastic opportunity to showcase your work and connect with AI researchers from across Europe.

Submission deadline: 1 September 2025

### **UPCOMING OPPORTUNITIES**

Al Launchpad Batch #2
- Scale your Al Startup

If you're ready to scale your Al startup with top European support, apply for Al Launchpad 2.0! What to expect:

- 1–2 week immersion visits to leading AI hubs
- Access to a broad network of AI entrepreneurs and experts
- Connections with investors, corporates, and fellow startups

Nomination deadline: August 31, 2025, 23:59 CET

Stay tuned to <u>our website</u> for updates as Al Launchpad continues to empower the next generation of Al innovators.



The AI for Trade Challenge, organised by ELIAS, the Center for Collective <u>Learning</u>, and partners including the OEC and World Bank, is open! Researchers, students, and professionals worldwide are invited to forecast US-China trade flows for October 2025 before the official data is released. Teams of 1-5 participants can use any method - statistical, machine learning, structural, or hybrid - and submit a CSV file and a short methods document.

### **Key Details:**

- **Deadline**: October 31, 2025
- Data Provided: Monthly US-China trade flows (2023–2024)
- Team Size: 1–5 participants

Participants will compete for cash prizes of \$3,000, \$2,000, and \$1,000, as well as OEC Premium accounts for all winners. Top teams will also present their results at an online closing session, sharing insights and methodologies.

Over 30 teams have already registered - form your own and enter the challenge!
More details and registration:

Learn more and register: Al for Trade Challenge



Nominations are open for the ELLIS Fellows & Scholars 2025 program! This prestigious initiative recognises outstanding Al researchers—both senior and early-career—who are driving the future of machine learning and intelligent systems in Europe. Fellows and Scholars play a key role in shaping research directions, mentoring the next generation, and strengthening Europe's Al community.

Nomination deadline: 30 September 2025

Learn more: <u>Fellows &</u> Scholars Stay up to date with ELIAS: Follow us on X, LinkedIn and Youtube to stay informed about our activities, initiatives, and opportunities for engagement.

