

NEWSLETTER #2

European Lighthouse of AI for Sustainability

ELIAS

Welcome to the **August 2024 edition** of the ELIAS Biannual Newsletter.

The ELIAS project is delighted to announce the successful completion of its inaugural year, marking a period of significant progress and developments in **AI research and innovation**. This milestone not only highlights our achievements but also paves the way for an exciting future. In this edition of our newsletter, we are thrilled to present a detailed update on our journey thus far. We will showcase the major accomplishments and notable breakthroughs from the past six months, including pioneering research, fruitful collaborations, and significant events that have shaped our work.

Additionally, we will offer insights into our strategic plans and objectives for the coming six months. This will include a preview of **upcoming activities, new opportunities for engagement, and updates on our ongoing initiatives**. We look forward to sharing the exciting developments ahead and encourage you to stay involved as we continue **to advance the frontiers of AI**.

Thank you for your engagement. Your contributions are crucial to our success as we move forward in our mission to drive innovation in artificial intelligence.

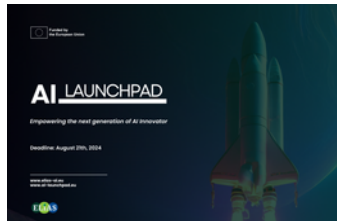


HIGHLIGHTS

»»» PAN-EUROPEAN ACCELERATOR PROGRAM: AI LAUNCHPAD

The AI Launchpad aims to create a unified platform supporting AI startups across Europe by integrating six key hubs into a centralised network (**Vienna, Lyngby, Heilbronn, Stockholm, Munich, and Zurich**).

This initiative brings together top AI researchers and entrepreneurs, offering startups the tools and resources needed to succeed. Startups can



apply through the AI Launchpad portal to become a rising AI startup with the **ELIAS, ELLIS, and RISE Europe network**. The first pilot batch will be announced in September 2024! After a 12-week local program, teams will attend a **2-week Market Entry Camp in February 2025**, followed by a demo day in March 2025. More information is available at [AI Launchpad](#).

[Read more..](#)

»»» CALL FOR PROPOSALS: ELIAS NODES

The European Lighthouse of AI for Sustainability announced its first round of proposals for the creation of **ELIAS Nodes**, aimed at fostering **European leadership in innovation with AI and Science**.



ELIAS nodes are designed to recognise and accelerate locally developed AI and science-based innovations while serving as integral parts of **the ELIAS Alliance**.

This pan-European AI-preneurial network sought to enhance academic education through the **open-source development of foundation models** and to support a network of incubators and startups dedicated to European value creation.

[Read more..](#)

PhD & Postdoc Program

The new interdisciplinary track for ELLIS PhD students and postdocs, supported by ELIAS, aims to bridge **traditionally unrelated fields such as law, biology, social sciences, and humanities with machine learning and AI**. This initiative, particularly the third track focusing on Sustainable AI, seeks to attract individuals passionate about exploring **sustainability and AI**. By fostering collaborations across diverse disciplines, ELIAS and ELLIS are creating unique opportunities for impactful research that addresses essential societal challenges. This program aligns with ELIAS's mission to advance AI research with significant contributions to sustainability and interdisciplinary innovation. [Read more..](#)

ELIAS Mobility Program

For young scientists eager to advance their careers in Europe, the ELIAS Mobility Program offers a unique opportunity. By facilitating research exchanges within the ELLIS and ELIAS network, the program enables **PhD students and postdocs to collaborate with leading industry and academic partners across Europe**, driving AI and sustainability projects forward. Financial support is available year-round, encouraging the development of **sustainable innovation and economic growth**. [Read more..](#)

>>> ELLIS DOCTORAL SYMPOSIUM #EDS2024: AI & SUSTAINABILITY

The ELLIS Doctoral Symposium, a key event in the **ELLIS PhD Program**, stood out as a major highlight of the year. Held annually, this conference brings together ELLIS PhD students and their peers from other institutions to exchange insights on machine learning. This year, the symposium was held in **Paris, France, from August 26–30**, with a central focus on **AI and Sustainability**. The event provided a dynamic platform for discussing cutting-edge research and fostering collaboration in the intersection of artificial intelligence and sustainable practices.

[Read more..](#)

>>> 4TH COMMUNITY WORKSHOP 2024



The 4th Community Workshop 2024, held between **June 26–28 in Thessaloniki, Greece**, celebrated four years of AI research excellence and foresighted the impact of European Networks of Excellence Centres in AI and Robotics, including ELIAS. This event provided a forum for sharing ideas, best practices, and sustaining collaborations beyond the NoEs' lifetime. It was a valuable opportunity for ELIAS to

connect with various networks, contributing to the Strategic Research Agenda that will guide AI research and innovation in the upcoming period.

[Read more..](#)

>>> ELLIS / ELIAS HCML WORKSHOP 2024

The annual workshop of the ELLIS Human-centric Machine Learning (HCML) Programme was held **on June 27, 2024 in Helsinki and online**, as part of the ELISE Wrap Up Conference & ELLIS Community Event. Co-organised by ELISE, this workshop was also a part of the ELIAS Horizon Europe project. It brought together leading AI researchers from across Europe, in line with the goals of the ELLIS Programs, which are modelled on the CIFAR Programme and focus on collaboration on **high-impact AI challenges**. The HCML Programme aims to ensure public trust in AI by **promoting transparency, accountability, interpretability, and fairness in algorithmic decision-making**.

[Read more..](#)

>>> SCIENCEPRENEURSHIP SUMMER SCHOOL 2024 ON SUSTAINABILITY & AI

The Sciencepreneurship Summer School: Sustainability & AI, held from **April 29 to May 3, 2024, in Lausanne, Switzerland**, aimed to transform scientific innovations into real-world businesses, aligning with ELIAS's goal of leveraging AI for societal benefit.

Participants engaged in workshops and sessions on **navigating the path from lab to market, forming teams, securing funding, and overcoming entrepreneurial challenges**. This event highlighted the importance of translating AI advancements into sustainable ventures, fostering innovation, & building valuable networks, ultimately contributing to the ELIAS mission of advancing AI with positive societal impact.



[Read more..](#)

[Check all the past events..](#)

RESOURCES

The ELIAS website offers a comprehensive overview of our project's achievements and developments. Check out our resources page for:

»» SCIENTIFIC PUBLICATIONS

[read more](#)

»» PUBLIC REPORTS

[read more](#)

»» OPEN SOFTWARE & DATASET

[read more](#)

»» MEDIA RESOURCES

[read more](#)

Dive into our ELIAS Scientific Publications for the last six months to discover noteworthy contributions, demonstrating our dedication to advancing AI research.

Towards Optimal Trade-offs in Knowledge Distillation for CNNs and Vision Transformers at the Edge

Authors: John Violos; Symeon Papadopoulos; Ioannis Kompatsiaris

[access here](#)

A Characterization Theorem for Equivariant Networks with Point-wise Activations

Authors: Marco Pacini; Bruno Lepri; Xiaowen Dong; Gabriele Santin

[access here](#)

A Lie Group Approach to Riemannian Batch Normalization

Authors: Ziheng Chen; Yue Song; Yunmei Liu; Nicu Sebe

[access here](#)

Federated Generalized Category Discovery

Authors: Nan Pu; Wenjing Li; Xingyuan Ji; Yalan Qin; Nicu Sebe; Zhun Zhong

[access here](#)

Structural Group Unfairness: Measurement and Mitigation by means of the Effective Resistance

Authors: Adrian Arnaiz Rodriguez; Georgina Curto; Nuria Oliver

[access here](#)

UPCOMING ACTIVITIES

>>> #HHAI2024 CONFERENCE

- **Introduction of Startup Internship Program @ELLIS PhD Symposium**
 - *Date and place:* **Aug. 26–30 in Paris, France**
 - The Startup Internship Program which will be presented at the ELLIS PhD Symposium, aims to ignite entrepreneurial spirit and provide hands-on experience in the dynamic world of startups. The first group of students undertaking internships is scheduled for spring/summer 2025.
- **Kick-off of AI Launchpad:**
 - *Date and place:* **Starting Sept./Oct. at six different locations (Vienna, Austria; Lyngby, Denmark; Heilbronn, Germany; Stockholm, Sweden; Munich, Germany; Zurich, Switzerland)**
 - Teams of entrepreneurial students and researchers have applied to develop VC-fundable AI startups. They will undergo a 12-week local accelerator program in one location and a 2-week Market Entry Camp in another hub, culminating in a demo day in March 2025. The first batch to participate in the [AI Launchpad program](#) will be announced on September 6, 2024!
- **AI + Environment Summit 2024, Innovation Park Dübendorf**
 - *Date and place:* **Oct. 2 in Zurich, Switzerland**
 - Join the summit organised by the ETH AI Center in collaboration with ELIAS for a day dedicated to inspiring, igniting and innovating work in AI for the environment. There will be talks by various academics, a poster session, talks by industry and startups and plenty of network opportunities. More details can be found [here](#).
- **IDEAHACK @IDEAS HQ**
 - *Date and place:* **Nov. 16–17 in Warsaw, Poland**
 - Teams of 3 to 5 Computer Science students will take part in the IDEAHACK which takes place on November 16 and 17, 2024, as an in-person hackathon at IDEAS's headquarters in Warsaw. *Further details will be provided soon.*

Stay up to date with ELIAS: Follow us on [X](#), [LinkedIn](#) and [Youtube](#) to stay informed about our activities, initiatives, and opportunities for engagement.

With kind regards,
ELIAS Team

