ELLIS PHD & POSTDOC PROGRAM INDUSTRY TRACK
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ABOUT ELLIS

ABOUT

ELLIS – the European Laboratory for Learning and Intelligent Systems – is a European AI network of excellence that focuses on fundamental science, technical innovation and societal impact. ELLIS builds upon machine learning as driving modern AI – inspired by a model of human intelligence which is not ‘programmed’ but which is shaped by and learns from data.

ELLIS UNITS

Highly innovative ecosystems emerge at outstanding academic institutions, which serve as international talent magnets and incubators of innovation. Thus, rather than just building a virtual network amongst institutions, ELLIS is creating new working environments for outstanding researchers to enable them to combine cutting-edge research with the creation of start-ups and industrial impact. ELLIS Units bring together the best AI researchers at their locations and fulfill a set of criteria to ensure excellence and to be maximally competitive at the international level.

FELLOWS AND SCHOLARS

ELLIS Fellows advance science and provide strategic advice and leadership not just scientifically, but also in terms of how to build and grow a network of excellence. ELLIS Scholars are outstanding junior scientists, often assistant professors, who do not yet have the seniority of a Fellow but are on a clear trajectory to reach this level.
ELLIS IN NUMBERS

30
ELLIS UNITS

14
EUROPEAN COUNTRIES
with ELLIS units

270+
ELLIS FELLOWS
outstanding senior researchers

76%
NETWORK GROWTH
from December 2019

13
FELLOWS PROGRAMS
focusing on high-impact research areas

1300
APPLICANTS
to the ELLIS PhD and Postdoc program in the first year

1000+
MEMBERS & SUPPORTERS
in the ELLIS network

220 MILLION
€ in FUNDING
to train and retain top AI talent in Europe

100+
INDUSTRY SUPPORTERS
including Bosch, Facebook, Google, Siemens, Qualcomm, Vodafone & more

60
PHD & POSTDOC PROGRAM

HELPING TO SHAPE THE FUTURE OF AI

The ELLIS PhD & Postdoc Program supports excellent young researchers across Europe by connecting them to leading researchers and offering a variety of networking and training activities.

ELLIS strives to identify, support and connect the top AI and Machine Learning talent in and across Europe. ELLIS PhD students, postdocs, and collaborations are held to the highest standards, and are curated specifically for their high achievement, outstanding innovation, and overall excellence in research. By joining the ELLIS Industry network, participants join a highly talented network of prestigious and cutting-edge researchers in both academia and industry.

THE PROGRAM AT A GLANCE

- access to a growing international network of over 200 leading machine learning researchers in academia and industry
- joint supervision by leading researchers and top industry profiles in a specific field of interest
- collaboration with top research groups
- access to summer schools, bootcamps, networking events, support programs, and workshops
- mobility and travel grants to facilitate international collaboration across the network
- access to high-end infrastructure
- contributing to society by working on high-impact challenges and developing ethical and trustworthy AI, the trademark for AI “made in Europe”
ELLIS is not only a brand of scientific excellence, it also takes the education and training of its junior researchers seriously. ELLIS PhD students and postdocs enjoy the benefits of:

**ACCESS TO THE ELLIS NETWORK**

ELLIS is a growing international network of over 200 leading machine learning researchers in academia and industry, with a unique capacity for initiating and supporting collaboration between top research groups. ELLIS fellows and members are world-renowned and leading voices in their fields. They are motivated to contribute to society by working on high-impact challenges and developing ethical and trustworthy AI, the trademark for AI “made in Europe”.

**BOOTCAMPS**

Incoming cohorts kick off the program with a multi-day bootcamp, focusing on the latest topics within AI and Machine Learning. Bootcamps feature talks by leading ELLIS members, keynotes on pressing issues, presentations by former ELLIS PhD and postdocs, networking events, and a hackathon-style activity organized in collaboration with an ELLIS industry sponsor.

**MOBILITY & TRAVEL GRANTS**

Through ELISE, a network part of the EU Horizon 2020 ICT-48 portfolio, the ELLIS PhD and Postdoc mobility program is able to financially support PhD students and postdocs in the partner network who want to initiate a collaboration with a Fellow or Member at another site.
PROGRAM BENEFITS (CONT’D)

NETWORKING EVENTS
ELLIS ensures that its network is utilized to its full extent through frequent networking events, aimed at establishing multi-modal connections between leading researchers across Europe, between academia and industry, and between junior and senior researchers.

SUPPORT PROGRAMS
The Program’s coordination office regularly checks in with students/postdocs to ensure that they are on-track with their research, that they are meeting the program requirements, that they are aware of potential opportunities within the network, and to answer any questions they might have.

CERTIFICATION
Upon completion of the ELLIS PhD & Postdoc Program and (in the case of PhDs) graduation or (in the case of postdocs) completion of their appointment, the candidate will receive an ELLIS PhD or ELLIS Postdoc Certificate, and will become an ELLIS Alumni.

ELLIS ALUMNI TITLE & ACCESS
In addition to certification as an ELLIS Alumni, the PhD / postdoc will be listed on the ELLIS Alumni page. They retain access to the ELLIS network as an alumni.
02
INDUSTRY TRACK
INDUSTRY TRACK

ABOUT

Within the ELLIS PhD & Postdoc Program’s Industry Track, PhD students and postdocs conduct their research in collaboration with an academic institution and an industry partner. They are co-supervised by two advisors, one from each of the partners, and split their time conducting research and working between the two. These advisors will each monitor the PhD student or postdoc’s progress and align regularly to keep the collaboration productive and on-track. It is expected that the PhD student or postdoc will publish the results of their research at top-tier venues in machine learning-driven fields with the support of both advisors.

IDENTIFYING EXCELLENT COLLABORATIONS

ELLIS strives to situate Europe as the global leader of excellence in Artificial Intelligence (AI). However, key stakeholders in AI innovation are often isolated from one another, creating information silos and slowing progress and development. By identifying and supporting model public-private partnerships, the ELLIS PhD & Postdoc Program’s Industry Track aims to help establish a vibrant and interactive ecosystem capable of fast-paced and high-level research and innovation.

Collaborations are selected for both their research excellence and the quality and depth of their partnership. The ELLIS Industry Track label ensures that the PhD student or postdoc, their advisors, and the founding collaboration meet ELLIS’ rigorous standards for excellence.
KEY BENEFITS

FOR PHDS AND POSTDOCS

For PhD students and postdocs, the program provides access to the ELLIS network and activities (boot camps, workshops, conferences, programs etc.), but also acts as a certificate of their excellence as researchers. The program also supports their mobility and collaboration with institutions beyond their primary university through travel grants.

FOR ACADEMIA / UNIVERSITIES

For academic institutions, the program similarly validates their ongoing research and current projects against the highest standards of excellence in Europe. Additionally, the program facilitates academic collaboration across Europe by supporting the mobility of PhD students and postdocs between institutions.

FOR INDUSTRY

Through the program’s Industry Track, collaborations between medium- to large-level corporates and academic institutions are supported and certified against ELLIS standards. These joint endeavors are assessed for productivity, mutual benefits, sustainability, and depth of collaboration.

Each of these key stakeholders benefits from certification by ELLIS, which currently provides the highest standards for excellence in research in machine learning and related areas in Europe.
03
APPLICATION & NOMINATION
## REQUIREMENTS TO APPLY

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<th>REQUIREMENTS</th>
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<td><strong>COLLABORATING PARTNERS</strong></td>
<td>1 European academic institution (e.g. university) + 1 European industry player (e.g. company)</td>
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<tr>
<td><strong>LOCATION</strong></td>
<td>Partners can be located in the same country/city, but must be based in Europe (regardless, in the case of the industry partner, of HQ location)</td>
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<tr>
<td><strong>FUNDING</strong></td>
<td>A minimum amount of funding must be provided: 3 years overall for a PhD student, and 2 years overall for a postdoc. The minimum duration of these appointments will therefore be 3 years (PhD) and 2 years (postdoc)</td>
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<td><strong>THE CANDIDATE</strong></td>
<td>The PhD student or postdoc candidate must have written at least one first author publication in one of the top-tier machine learning venues (e.g. NeurIPS, ICML, ICLR, JMLR, CVPR, ICCV, ECCV, IJCV, PAMI, RSS, CoRL, ACL, EMNLP, KDD, AAAI, IJCAI, COLT, UAI, SIGIR, WSDM, Web Conference)</td>
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<tr>
<td><strong>ADVISORS</strong></td>
<td>1 ELLIS fellow/scholar + 1 ELLIS fellow/scholar/member</td>
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## REQUIREMENTS DURING THE PROGRAM

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<td><strong>EXCHANGE &amp; TIME-SHARING</strong></td>
<td>The candidate will spend a minimum of 50% of their time at the academic partner institution AND the candidate will spend a minimum of 6 months with the industry partner. This can be accumulative (e.g. 2 days per week) or consecutive (e.g. a block similar to an internship)*</td>
</tr>
<tr>
<td><strong>LOCATION</strong></td>
<td>The research conducted by the PhD student / postdoc and the collaboration with both of their advisors must be based in Europe, including any research lab(s) that the candidate may work in</td>
</tr>
<tr>
<td><strong>PUBLISHING</strong></td>
<td>The candidate will publish the results of their research in top-tier venues in machine learning-driven fields. This also means that both the academic and industry partner institutions agree to publish the results of the candidate's research</td>
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NOMINATING CANDIDATES

PROCESS

Candidates for the Industry Track are currently only considered via nomination. Only ELLIS fellows and scholars can nominate PhD students and postdocs to the ELLIS PhD & Postdoc Program, and they must already have a second advisor from an industry partner committed.

The steps for nomination are as follows:

1. An ELLIS fellow or scholar nominates their existing PhD student or postdoc by submitting a Nomination Form.

2. The Nomination Form is reviewed by the PhD Committee. If all requirements have been met, the PhD student/postdoc will receive a Letter of Intent, to be completed together with their advisors. The Letter of Intent verifies that both partner institutions approve of the arrangement and understand the rules of engagement.

3. Once completed and signed by the candidate and both advisors, the Letter of Intent is uploaded to the submission portal (sent via email).

4. The signed Letter of Intent is received and reviewed. Once the collaboration is approved by the PhD Committee, the PhD student/postdoc is admitted to the ELLIS PhD & Postdoc Program.
CONTACT INFORMATION

**PhD Committee**
Nicolò Cesa-Bianchi
Università degli Studi di Milano

Andreas Geiger
University of Tübingen & Max Planck Institute for Intelligent Systems

Christoph H. Lampert
IST Austria

Bernhard Schölkopf
Max Planck Institute for Intelligent Systems

Josef Sivic
Czech Technical University, École Normale Supérieure & INRIA

**Coordination**
Lynn Anthonissen
University of Tübingen

Eliza Connolly
University of Amsterdam

**EMAIL**

ELLIS PhD & Postdoc Program
Industry track: phd-industry@ellis.eu
Academic track: phd@ellis.eu

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