ELLIS PHD PROGRAM

Information session for shortlisted applicants 2023



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ELLIS PHD COMMITTEE



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TODAY'S STUDENT PANEL



Karsten Roth ELLIS supervision: Zeynep Akata, University of Tübingen Oriol Vinyals, Google DeepMind



Background: Physics

Topics: XAI, multimodal RL



Siddhartha Gairola

ELLIS supervision: Bernt Schiele, MPI for Informatics Francesco Locatello, Amazon AWS

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Background: CS

Topics: XAI, Computer Vision, ML





ELLIS supervision: Tanja Käser, EPFL Adish Singla, MPI for Software Systems

A

Background: Math / CS

Topics: RL for Education



ELLIS supervision: Asja Fischer, Ruhr University Bochum Martin Jaggi, EPFL

Linara Adilova

Background: CS

Topics: Regularization

TODAY'S SESSION

- 1. Central Recruiting Process
- 2. What's next?
 - 1. Interviews
 - $\circ \quad \text{ 2. Offers} \quad$
 - 3. Admission
 - $\circ \quad 2021\,Stats$
- 3. ELLIS PhD students
- 4. Q&A

CENTRAL RECRUITING PROCESS

TIMELINE & SELECTION

Important dates

- November 15: Application deadline
- November early January: Multi-stage review ⇒ shortlist of candidates
- By mid-January: students are notified whether they are shortlisted
- January-February 15: interviews (self-organized by Advisors and their teams)
- Late February-March: advisors make offers
- May 1: deadline to inform ELLIS about advisor-student match
- September 15: deadline to inform ELLIS about the co-advisor
- Start in 2023; no common start (decided with advisor); unlikely before April; most will start around Sept/Oct 2023

Admission will be competitive

(~5 % acceptance rate)



CENTRAL RECRUITMENT

2020-2021 round (1st ELLIS cohort)

2021-2022 round (2nd ELLIS cohort)

2022-2023 round (ongoing; 3rd ELLIS cohort)

• >1,900 applications + 172 advisors recruiting





(Jan-Feb 15)

1. INTERVIEWS

- 18% of registered applicants (ca. 360 candidates) made it onto the shortlist. All shortlisted candidates were vetted by ELLIS faculty and received excellent scores in our central reviewing process. Candidates that eventually get an offer **by one of the faculty participating** in this round (see apply.ellis.eu >> Available advisors) will be eligible to join the ELLIS program (note: mandatory mobility component).
- Interviews are not scheduled by the ELLIS administration, but by the advisors themselves. That is, advisors will contact you personally if they are interested in your profile and want to invite you for an interview.
 - Being shortlisted does not mean that you will automatically be invited for one or multiple interviews. Participating faculty eventually decide whom and how many candidates they will invite for interviews.
 - Participating ELLIS PIs have access to all the applications. Advisors you did not list as "preferred" advisor may therefore contact you if they think you could be a good fit. You're free to decline interview invitations if there are too many or if you're not interested in working with this advisor. This will not affect your chances of being admitted to the PhD program under the supervision of another advisor.
 - A lot of **variation** between advisors (how many candidates they invite, format and length of interview, local regulations for admission, types of funding and how this relates to the PhD topic (open or already well defined), etc.)
- If you're no longer considering joining the ELLIS PhD program, e.g. because you have accepted an offer elsewhere, please let us know at <u>phd@ellis.eu</u> so that we can keep the info up to date.

(Feb 15-May 1)

2. OFFERS

- The interview stage ends on February 15. Next, if a good match is found, recruiting advisors will extend offers for open positions in their labs. Advisors inform ELLIS about accepted offers by May 1. The hiring process is done locally at the respective institution (organized by advisors).
- During this stage, PIs can also conduct additional interviews if they haven't filled their positions.

Code of conduct

ELLIS aims to facilitate the best advisor-student matches possible. We therefore expect advisors to comply with our Code of Conduct which states that advisors should not pressure students into deciding on an offer before **March 1st**, **2023**. This allows students to interview with multiple PIs in the case that more than one advisor is interested in the candidate. Specifically, the Code of Conduct for advisors includes the following paragraph:

"It is expected that the top candidates will attract the interest of multiple PIs. The interview phase, which runs until February 15, gives students the time to interview with multiple advisors so they can make an informed decision and find the best match. Some advisors may only be able to conduct interviews towards the end of the interview stage. Students must not be pressured into accepting offers before March 1st."

ombuds@ellis.eu

(Feb 15-May 1) **2. OFFERS**

- ELLIS is a "meta-program"; the ELLIS society does not employ nor fund PhD students.
 - → If you get an offer, you will be funded through your advisors' resources (nature and amount of funding and benefits may vary depending on country, institution etc.: contract vs. stipend). In some cases, a parallel application to a doctoral school, funding body or vacancy is required in order to be considered for that particular institution.
 - → Hiring process is local; conditions and regulations stipulated by the respective institution; admission requirements of local institutions apply. If, for whatever reason, the student is not accepted at the degree-granting institution to start their PhD, the offer to become an ELLIS PhD Student is cancelled.
 - → Ask questions during interviews when in doubt.

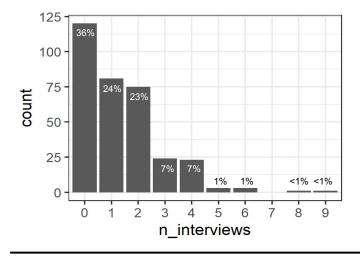
3. ADMISSION

- Shortlisted candidates who receive an offer by one of the recruiting advisors (see apply.ellis.eu >> Available advisors) and are hired at the partnering institution are eligible to become affiliated with the ELLIS PhD Program as 'ELLIS PhD Students'. The requirements and instructions for admission to the ELLIS network and PhD program can be found here: https://ellis.eu/phd-admission.
- May 1: deadline for advisors to confirm accepted offers
 - → student is conditionally admitted to ELLIS; info session in May/June
 - → hiring process is done locally
 - → admission to ELLIS can only be finalized when the student enrolls or gets a contract at the degree-granting institution and has found a co-supervisor (by September 15)
- September 15: deadline to determine a co-supervisor and submit the letter of intent
 - → co-advisors can be selected from a wider group: ellis.eu/members (only those based in Europe and affiliated countries with ELLIS units, e.g. Israel)
 - Primary advisor: academic institution (cf. list on the portal: "Available advisors")
 - Secondary advisor
 - academic institution in a different country (Academic Track)
 - industry partner (Industry Track)

FOR REFERENCE: 2021 STATS

- >1,700 applications; 125 advisors participating; 20% of candidates shortlisted
- 64% of shortlisted candidates got interviews; 29% of shortlisted candidates got an offer

Shortlisted candidates 2021 - Number of interviews





ELLIS: EXCELLENCE IN AI

ELLIS Mission

- Attract and enable the best minds
- Create regional ecosystems around leading AI research
- Bring Europe's leading AI hotspots together



O Sites

ELLIS connects leading experts working on **high-impact problems** that have the potential to drive **breakthroughs** in modern AI. Fellows are organized into **14 programs** ranging from basic research on algorithms to applications in health and climate sciences. ELLIS establishes regional ecosystems around leading AI research, which serve as international talent magnets and incubators of innovation. 35 ELLIS sites co-operate as part of a multi-centric AI research laboratory that attracts the world's best minds.



ELLIS attracts and nurtures **talent**. It offers outstanding young researchers a unique entry point to cutting-edge machine learning research, supporting deep cross-border and interdisciplinary **collaborations** as well as partnerships with top industry labs.







ELLIS connects leading experts working on **high-impact problems** that have the potential to drive **breakthroughs** in modern AI. Fellows are organized into **14 programs** ranging from basic research on algorithms to applications in health and climate sciences.

Geometric Deep Learning	Robust Machine Learning	Interactive Learning	Computer Vision	Robot Learning
Human-centric Machine Learning	Theory & Algorithms	Quantum- & Physics-Based ML	Natural Intelligence	Health
Earth & Climate Sciences	Natural Language Processing	Symbolic Machine Learning	Multimodal Learning Systems	



ELLIS establishes regional ecosystems around leading AI research, which serve as international talent magnets and incubators of innovation. 35 ELLIS sites co-operate as part of a multi-centric AI research laboratory that attracts the world's best minds.





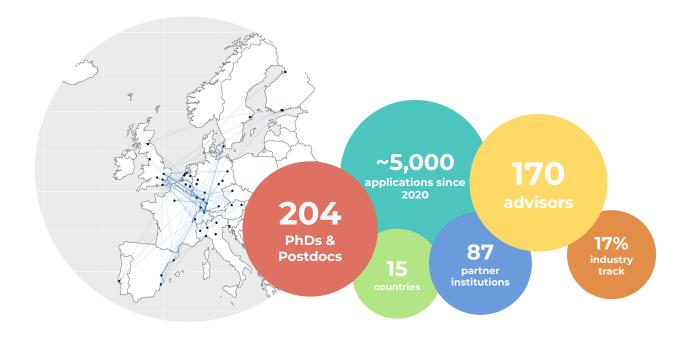


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PHD NETWORK



JOIN THE ELLIS COMMUNITY

Why ELLIS?

- competitive program recognized for excellence
- joint supervision by leading researchers; work with the best labs in Europe
- access to densely-connected ELLIS network & activities
- exchange program & mobility support via the ELISE project



ELLIS Doctoral Symposium 2022 @ Alicante, Spain

OUT OF LUCK THIS TIME?

You didn't get a position this round? Stay in touch with the ELLIS network! If at some point you're hired locally by any of the fellows via another route, you could still consider joining the ELLIS program via "nomination" (requirements here: <u>https://ellis.eu/nomination-phd-postdoc</u>).

Check out our events at ellis.eu/events and follow us on social media:

Stwitter.com/ellisforeurope

#ELLISPhD # ELLISforEurope #JoinELLISforEurope

- facebook.com/ELLISforEurope
- in linkedin.com/company/ellisforeurope
- youtube.com/@ELLISforEurope
- mastodon server coming soon!

We also welcome you to subscribe to the monthly **email newsletter** at <u>http://mailings.ellis.eu/f/308920-319327/</u>.

ELLIS PHD STUDENTS

TODAY'S STUDENT PANEL



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Background: Math / CS

Topics: RL for Education



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Linara Adilova

Background: CS

Topics: Regularization



USEFUL LINKS

- **Program webpage:** *ellis.eu/phd-postdoc*
- Admission info: ellis.eu/phd-admission
- **Portal:** apply.ellis.eu
- FAQs: ellis.eu/FAQS

1. Who shortlisted me?

It concerns a "general" ELLIS shortlist: all candidates who received excellent scores in our centralized reviewing process have been shortlisted and can be considered for interviews (reviewers were centrally assigned by ELLIS based on research areas and preferences for advisors). It's now up to individual advisors to contact students who could be a good fit, i.e. advisors interested in your profile will contact you directly.

2. Will I be interviewed by all the advisors I listed as "preferred advisor"?

See previous question. Being shortlisted does not mean that you will automatically be invited for one or multiple interviews. Participating faculty eventually decide whom and how many candidates they will invite for interviews. For reference, in last year's round most candidates eventually admitted to the program were invited by 2-4 different PIs for interviews; very few students were invited by more than 5 PIs.

3. Should I contact an advisor I'm interested in working with?

This is a difficult question as advisors' preferences may differ. Typically, advisors themselves will contact the candidates they are interested in. If you've listed them as a preferred advisor in the list of preferences in your application, the advisor will be able to see this in our application database (e.g. they can filter applications for students that listed them as a preferred advisor).

Advisors will be reminded by the ELLIS office regularly about the interview deadlines, and are encouraged to reach out to candidates as soon as possible. However, some advisors may only be able to review applications towards the end of the interview phase. In some cases, it may help to reach out to advisors yourself but be aware that this may create a lot of overhead for advisors (they receive a high volume of email each day). So if you plan to contact advisors, it is absolutely necessary to check on the advisor's website if they have an **email policy** or a '**Read me' / FAQs / Application guide for applicants** and follow the rules they specify (e.g. some may ask to contact a specific email address/assistant, fill out a form, mention a specific code in the subject line etc). Also make sure your message is personalized and relevant, and reflects a genuine interest in the advisors' research/lab etc. DO NOT send bulk or generic emails or random interview requests! Be aware that advisors may recruit students via different channels, so give some context about your application to ELLIS.

4. How to prepare for an interview?

Know that interviews may come in different formats and scenarios (e.g. 1:1 with advisor, presentation, meet with advisor's research group, panel interview, coding interview, etc) \Rightarrow everyone's experience will be different.

Cover the basics

- review your research statement, be prepared to talk about your research interests in details as well as your future research direction and plans
- be prepared to present and elaborate on previous research projects (incl. your key contributions/role in the project) and discuss relevant experience
- do your background research: potential supervisor's work, current research/important issues in the field
- motivation for pursuing a PhD (why a PhD? what are your goals? why this advisor/lab, field/topic, uni/program? how do you fit?)
- prepare for commonly asked questions, be specific and to the point, be prepared to articulate examples from your own experience that demonstrate certain skills in a structured way
- ask relevant questions during the interview, approach your interview as a conversation where both parties want to learn if they are a good match
- many more tips can be found on the internet; talk with people in the field

Technical preparation: ELLIS PhD student Patrik lists some technical topics that might come up in ML interviews: https://rpatrik96.github.io/posts/2023/01/ml-interview-checklist/.

5. Until when should we expect to receive interview invites?

January - February 15 (but we encourage advisors not to wait with sending out invites until the end of the interview stage). Until May 1st, advisors can also interview back-up candidates.

6. Do we get to update application materials?

At this point it is no longer possible to update application materials or to update/delete material submitted earlier. However, we can attach "supporting documents" to your application file. If you wish to do so, please send the material as a single PDF to phd@ellis.eu.

7. Can I add another advisor to my application?

At this point it is no longer possible to change advisor preferences via the portal, but you could write an email to the advisor to express your interest. They will be able to find your application materials on the portal. The original preferences you submitted are only preliminary. See FAQ 3 in this presentation for some caveats and email policies!

8. What if the university of the primary advisor has a separate parallel application where official decisions only happen after May 1?

If the advisor wants to work with you, but decisions depend on another selection procedure, the advisor should notify ELLIS by May 1st mentioning that the offer depends on the student being selected at a later date. Please make sure to clarify with the advisor during the interview stage whether funding is secured or conditional upon acceptance to the local program.

An example situation: You are most interested in working with Prof. X and there is a strong mutual interest, but decisions for the local program/funding are only made in July. You can be 'conditionally accepted' in the ELLIS process if the advisor notifies us about this by the May 1st deadline. Your offer is conditional and will depend on acceptance to the university/local program in July. If accepted, you can join the ELLIS program.

9. Co-advisor: is there any particular process to follow?

Finding a co-advisor only really becomes important after finding a match with the primary advisor. There is no specific procedure to follow. We strongly encourage advisors to discuss potential co-advisors with the student. They can help students to establish the first contact. All ELLIS members based in Europe (see next slide) are eligible for co-supervision. Note that in some particular cases, e.g. where funding is tied to a joint project between two partners, the choice of co-advisor may be restricted. The deadline to inform ELLIS about accepted offers (primary advisor) is May 1st; the deadline to inform ELLIS about the co-advisor is September 15. Further instructions will follow.

10. Co-advisor: can we have a co-advisor who is not an ELLIS member?

- Academic Track: No, the secondary advisor should be an ELLIS member. However, you could ask a potential co-advisor to apply for ELLIS membership (details at ellis.eu/members) if they are interested in co-supervision within the ELLIS network. If they regularly publish in ML venues, and know two existing ELLIS members who are willing to endorse them, it should not take more than two weeks for the application to be reviewed by the Membership Committee.
- Industry Track: In general, no, but there is one exception (this holds primarily for nominations where a collaboration is already in place). In case the industry advisor (secondary advisor) is not an ELLIS member and it proves difficult for them fulfill the criteria for membership, it is possible for them to join if they have co-authored a paper with the applying student as a result of their collaboration, in a top-tier venue in machine learning or related sub-fields (see https://ellis.eu/nomination-phd-postdoc for details).

11. Co-advisor: can we have a co-advisor outside of Europe*?

(*= Europe and associated countries with ELLIS units, e.g. Israel)

In general, no, as the mission and focus of our program is to connect the best labs and minds in Europe. The two institutions must therefore be located in different European countries. There is one exception: In the academic track, the co-supervisor can be based outside of Europe, but must in that case be an <u>ELLIS fellow or scholar</u>. The degree must come from a European institution, and the primary advisor must be based in Europe.

11. Can an ELLIS member (who is not a fellow, scholar or unit faculty) be my primary advisor?

- In general, yes. Note, however, that the <u>central recruiting</u> (via the portal) is only open to fellows, scholars, and unit faculty. Additionally, to be admitted via the central recruiting this year, one of your ELLIS advisors (either your primary or secondary advisor) needs to be listed on the application portal: see list "Available Advisors". I.e. if you have an offer from an ELLIS member outside of the centralized recruiting, and wish to join ELLIS in the current round, you should find a co-advisor from one of the listed advisors on the portal (by May 1st at the latest). Please email <u>phd@ellis.eu</u> if you are in this situation and we'll let you know how to proceed depending on your personal situation.
- It is also possible to join the program at a later time via <u>nomination</u>, but this entails additional requirements (see <u>https://ellis.eu/nomination-phd-postdoc</u> for details).

12. I have accepted an offer from an ELLIS fellow/scholar/unit faculty/member outside of the ELLIS centralized recruiting round. Can I still join the program?

- To be admitted via the <u>central recruiting</u> this year, one of your ELLIS advisors (either your primary or secondary advisor) needs to be listed on the application portal (see list "Available Advisors"). I.e. if you have an offer from an ELLIS faculty outside of the centralized recruiting, and wish to join ELLIS in the current round, you should find a co-advisor from one of the listed advisors on the portal (by May 1 at the latest). Please email <u>phd@ellis.eu</u> if you are in this situation and we'll let you know how to proceed depending on your personal situation.
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