

2nd year MSc in NLP: Welcome!

Karën Fort

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Introduction

Reminders

2 specializations: robustness and reasoning

Master thesis / Internship

Not to do

Working together

Karën Fort (she/her)



You?



Administration

- ▶ Maxime Amblard, head of the Master TAL:
maxime.amblard@univ-lorraine.fr
 - ▶ in charge of the Master
 - ▶ in charge of the Master 1
- ▶ Karën Fort, Erasmus Mundus LCT local coordinator,
karen.fort@univ-lorraine.fr
 - ▶ in charge of the Master 2
- ▶ Alexandre Ruaux-Andrique, general questions :
alexandre.ruaux-andrique@univ-lorraine.fr
- ▶ Karine Weisse, administrative issues: karine.weisse@univ-lorraine.fr
- ▶ Marie-Luce Boulet, marie-luce.boulet@univ-lorraine.fr

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Practical points

Registration! ENT, schedule, mailing list, Crous, ...

You need your **laptop!**

If you don't have one, the IDMC can lend you one
(we have a limited number of computers, so go and ask for one now!)

Contact: marie-luce.boulet@univ-lorraine.fr

Join the Discord Server!

(contact: MaximeAmblard#3475)

Contacts and lists

- ▶ <https://idmc.univ-lorraine.fr/>
- ▶ Mailing list:
idmc-m2-tal-2627@etu.univ-lorraine.fr
- ▶ Schedule (ADE): <https://monade.univ-lorraine.fr/> (many updates!)
- ▶ Course platform (depending on teachers): <https://arche.univ-lorraine.fr>
- ▶ Administrative registration: <https://inscriptions.univ-lorraine.fr>
- ▶ Pedagogical registration (IP) <https://ipweb.univ-lorraine.fr>
- ▶ grades etc. <https://ent.univ-lorraine.fr>

Apprenticeship (alternance)

possible until the first apprenticeship period (mid-October)

- ▶ **work**-study contract with companies
- ▶ includes your internship
- ▶ M2 students have a asynchronous calendar of alternance
- ▶ During the alternance weeks, you have few courses: They're **not** (at all) holidays!
- ▶ Alternance students do not have some projects

Overall schedule for students

M2 — University Calendar — 2026/2027Apprentices											
Courses				Apprenticeship				Bank Holiday			
September	October	November	December	January	February	March	April	May	June	July	August
T 1 START OF S9	T 1	S 1 Bank Holiday	T 1	F 1 Bank Holiday	M 1	M 1	T 1	S 1 Bank Holiday	T 1	T 1	S 1
W 2	F 2	M 2	W 2	S 2	T 2	T 2	F 2	S 2	W 2	F 2	M 2
T 3	S 3	T 3	T 3	S 3	W 3	W 3	S 3	M 3	T 3	S 3	T 3
F 4	S 4	W 4	F 4	M 4	T 4	T 4	S 4	T 4	F 4	S 4	W 4
S 5	M 5	T 5	S 5	T 5	F 5	F 5	M 5 S9 Rest exams	W 5	S 5	M 5	T 5
S 6	T 6	F 6	S 6	W 6	S 6	S 6	T 6 S9 Rest exams	T 6 Bank Holiday	S 6	T 6	F 6
M 7	W 7	S 7	M 7	T 7	S 7	S 7	W 7 S9 Rest exams	F 7	M 7	W 7	S 7
T 8	T 8	S 8	T 8	F 8	M 8	START OF S10	T 8 S9 Rest exams	S 8 Bank Holiday	T 8	T 8	S 8
W 9	F 9	M 9	W 9	S 9	T 9	T 9	S 9 S9 Rest exams	W 9	F 9	M 9	W 9
T 10	S 10	T 10	T 10	S 10	W 10	W 10	S 10	M 10	T 10	S 10	T 10
F 11	S 11	W 11 Bank Holiday	F 11	M 11	T 11	T 11	S 11	T 11	F 11	S 11	W 11
S 12	M 12	T 12	S 12	T 12	F 12	F 12	M 12	W 12	S 12	M 12	T 12
S 13	T 13	F 13	S 13	W 13	S 13	S 13	T 13	T 13	S 13	T 13	F 13
M 14	W 14	S 14	M 14	T 14	S 14	S 14	W 14	F 14	M 14	W 14 Bank Holiday	S 14
T 15	T 15	S 15	T 15	F 15	M 15	M 15 July S9	T 15	S 15	T 15	T 15	S 15
W 16	F 16	M 16	W 16	S 16	T 16	T 16	F 16	S 16	W 16	F 16	M 16
T 17	S 17	T 17	T 17	S 17	W 17	W 17	S 17	M 17 Bank Holiday	T 17	S 17	T 17
F 18	S 18	W 18	F 18	M 18	T 18	T 18	S 18	T 18	F 18	S 18	W 18
S 19	M 19	T 19	S 19	T 19	F 19	F 19	M 19	W 19	S 19	M 19	T 19
S 20	T 20	F 20	S 20	W 20	S 20	S 20	T 20	T 20	S 20	T 20	F 20
M 21	W 21	S 21	M 21	T 21	S 21	S 21	W 21	F 21	M 21	W 21	S 21
T 22	T 22	S 22	T 22	F 22	M 22	M 22	T 22	S 22	T 22	T 22	S 22
W 23	F 23	M 23	W 23	S 23	T 23	T 23	F 23	S 23	W 23	F 23	M 23
T 24	S 24	T 24	T 24	S 24	W 24	W 24	S 24	M 24	T 24	S 24	T 24
F 25	S 25	W 25	F 25 Bank Holiday	M 25	T 25	T 25	S 25	T 25	F 25	S 25	W 25 Defences
S 26	M 26	T 26	S 26	T 26	F 26	F 26	M 26	W 26	S 26	M 26	T 26 Defences
S 27	T 27	F 27	S 27	W 27	T 27	S 27	T 27	S 27	T 27	T 27	F 27 Defences
M 28	W 28	S 28	M 28	T 28	S 28	S 28	W 28	F 28	M 28	W 28	S 28
T 29	T 29	S 29	T 29	F 29		M 29 Bank Holiday	T 29	S 29	T 29	T 29	S 29
W 30	F 30	M 30	W 30	S 30		T 30	F 30	S 30	W 30	F 30	M 30
	S 31		T 31	S 31		W 31		M 31		S 31	T 31

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80% in common

- ▶ 901 - Basics in NLP : 124h
- ▶ 902 - Openings : 116h
- ▶ 903:
 - ▶ Robustness: 88h
 - ▶ Reasoning: 88h
- ▶ 904 - 904 - Project and Language Course : 44 + 24

901: basics in NLP

Course name	Person in charge
Neural networks	P. Magron
Written data processing	A. Laggoun
Speech processing	V. Martin
Generative AI	F. Buet
Lexical resources	B. Guillaume
LLM	C. Cerisara

UE 902: Openings

Course name	Person in charge
Syntactic models	S. Pogodalla
Discourse	M. Amblard
Speech recognition and synthesis	I. Illina
Signal processing	V. Martin
Ontology	M. d'Aquin
Terminology	A. Polguère
Dialog engineering	A. Decker

UE 903: Robustness

Course name	Person in charge
Prompt engineering	J. Bezançon
Robust speech processing	R. Serizel
Less-resourced languages	D. Bernhard & C. Engelhart
Lexicology	J. Bezançon
Ethics	K. Fort

UE 903: Reasoning

Course name	Person in charge
Semantics	P. de Groote
Symbolic Knowledge discovery	B. Gendron
AI reasoning	E. Zheng & I. E. Ghebriout
Pragmatics	M. Dargnat
Opinion analysis and multilingualism	M. Mieskes

UE 904: Project, Orientation, Foreign Languages

Course name	Person in charge
Software projects	K. Fort
Orientation	K. Fort & H. de Mazancourt
NLP outside NLP	TBC
Foreign Language course (EN/FR)	TBC

About projects (apprentices not concerned)

We will propose projects, but you can **propose your own** (groups of 4)
Think about it rapidly!

Evaluation

- ▶ average computed with marks obtained in all the courses with a coefficient proportional to the ECTS credits
- ▶ the semester is passed if the average is at least 10/20 and if no mark at the UE level is less than 8
- ▶ **ONLY** the students who failed the semester after the first session, go to the second session.
- ▶ Results of the second session **replace** the corresponding marks of the first session.

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UE 1001 - Internship - What? When?

Internship:

- ▶ minimum 5 months
- ▶ from the beg. of March
- ▶ in a research lab or in the private sector (to be validated by us)
- ▶ supervisor onsite and godfather/godmother/tuteurice from the pedagogical team

Manuscript (thesis):

- ▶ 50 pages max (bibliography and appendices excluded)
- ▶ deadline: end of August

Defense:

- ▶ Beginning of Sept.
- ▶ 20 min. presentation + 15 min questions
- ▶ your **supervisor should attend** (remote is possible, organized by you)

Writing a thesis: some basics

- ▶ strictly respect the deadline
- ▶ strictly respect the maximum nb of pages
- ▶ (mandatory) use the provided template (see <https://idmc.univ-lorraine.fr/student-hub-nlp/>)
- ▶ do not put ArXiv references when there is a real publication
- ▶ source all your illustrations
- ▶ put some examples
- ▶ it is a thesis, not a mere report $\Rightarrow$ a state of the art and a thorough evaluation are mandatory
- ▶ make sure your local supervisor writes their evaluation (see Hub)

Presenting your work: some basics

- ▶ start preparing in advance and **rehearse** you presentation (with your supervisor)
- ▶ 20 min presentation = more or less 20 slides (no more than 30, even if you're quick)
- ▶ **do not rush** during your presentation $\Rightarrow$ make choices (don't present everything)
- ▶ watch the jury, not your slides
- ▶ no full sentences on slides
- ▶ **source** all your illustrations
- ▶ put some **examples**
- ▶ **justify** your work (why is it important?)

Beware! Money

- ▶ the basic allowance for internships in France is **around €650** (research labs will generally pay you this minimum)
- ▶ big cities are much more expensive than Nancy (esp. Paris)

Beware! Planing

- ▶ start searching soon
- ▶ register to the LN and CORPORA mailing lists (we will **NOT** forward you their ads)
- ▶ send a lot of resumes/CV (less than 10 is not a lot)

Who does what?

1. you find an internship (not us)
 2. once you're accepted as an intern, you send me the subject, that I need to validate: if it's not NLP, it will not be accepted
 3. you get in contact with Karine Weisse for the paperwork
- ▶ if it's abroad, it's more complex, we need more time
 - ▶ there are many of you, take that into account

Beware! ZRR

LORIA (and most computer science labs in France) is a ZRR building, which means that:

- ▶ you'll need to go through a security screening to be allowed to enter
- ▶ if you're from a country out of EU:
 - ▶ it takes (even more) time
 - ▶ you will not necessarily be allowed in

→ all the paperwork should be done well **in advance**

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Plagiarism is BAD¹

¹and forbidden

Is using an LLM a good idea?

Is using an LLM a good idea?

It is like going to the gym with a forklift!

Using an LLM: consequences

We discovered a consistent homogeneity across the Named Entities Recognition (NERs), n-grams, ontology of topics within each group. EEG analysis presented robust evidence that LLM, Search Engine and Brain-only groups had significantly different neural connectivity patterns, reflecting divergent cognitive strategies. Brain connectivity systematically scaled down with the amount of external support: the Brain-only group exhibited the strongest, widest-ranging networks, Search Engine group showed intermediate engagement, and LLM assistance elicited the weakest overall coupling. In session 4, LLM-to-Brain participants showed weaker neural connectivity and under-engagement of alpha and beta networks; and the Brain-to-LLM participants demonstrated higher memory recall, and re-engagement of widespread occipito-parietal and prefrontal nodes, likely supporting the visual processing, similar to the one frequently perceived in the Search Engine group. The reported ownership of LLM group's essays in the interviews was low. The Search Engine group had strong ownership, but lesser than the Brain-only group. The LLM group also fell behind in their ability to quote from the essays they wrote just minutes prior.

<https://arxiv.org/pdf/2506.08872>

Using an LLM: consequences

During the final preparation of my report, I used generative AI to help me organize the .bib file and connect the references to the inline LaTeX citations. [...] the model introduced incorrect references instead of linking the claims to the papers I had actually used. [M2 student from 2026]

Using ChatGPT to choose for you

Good idea?

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Some feedback from (some) previous years students

*As a former student, I have the feeling that the overall friendly and welcoming atmosphere of the master's was somehow **spoiled by some careless behaviours**. During the second year especially, I was bothered by the unapologetic habit of some students to arrive (very) late in class, sometimes interrupting the professor and making everyone lose time for every batch of late comers.*

*Overall, reactions to the mention of late arrivals and freely coming and going into classes were that "we should be treated as **adults**" ... Well, my feeling was that sometimes, we (as a class) weren't really behaving as such.*

*I was also **ashamed** to hear that Cognitive Science students (who we shared some classes with) reported bad experience with **NLP people's discourtesies** to their master's supervisors.*

Collective contract

Are there things you would like to change (from last year) in terms of:

- ▶ behavior of your classmates?
- ▶ organization?

What I'm asking you to do

- ▶ be respectful (if you want to be respected):
 - ▶ be on time
 - ▶ be polite
 - ▶ take others into consideration
- ▶ attend the group you are assigned to (if you cannot, switch with somebody and tell the teacher)
- ▶ help each other

Cultural difficulties

Every year we encounter cultural difficulties. . .

- ▶ It is important to say **when** you don't understand **what** you don't understand, it doesn't affect the perception you give
- ▶ It is important to address **all** people working in the building (teachers, secretaries, IT staff, cleaning staff, etc.) **politely**.

We are all working to make your studies easier and to improve your daily life.

- ▶ Finally:
 - ▶ Deadlines **must** be respected
 - ▶ You should **anticipate** difficulties as much as possible
 - ▶ **Do not remain isolated** - do not leave others in isolation
 - ▶ If you see something, **react**

Inclusion

- ▶ International relations Office (DRIE) can be very helpful (including with visa process, administrative work etc.)
- ▶ <https://welcome.univ-lorraine.fr/en/>
- ▶ Equality – Diversity - Inclusion
Regardless of your origin, your culture, your sexual orientation, your gender identity, your religion, your appearance, your differences, you all belong to the same community.

Enjoy your year!

- ▶ Sept: Le livre sur la place
- ▶ Oct: Nancy Jazz Pulsation (NJP)
- ▶ Opera (some **very cheap** seats), La Manufacture, salle Poirel, l'Autre canal, CCAM
- ▶ Médiathèque (**free**, just next door)
- ▶ Movie theaters Caméo (VO)
- ▶ museum aquarium (great exhibits, free 1st Sunday of the month)
- ▶ museum of fine arts
- ▶ Metz: centre Pompidou-Metz