



Exploring the use of Gen-AI by International Students in France

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Introduction

- CPU-Lyon
 - Non-for-profit association for helping international students
 - 150 volunteers
 - 400 international students

Research question:

What are the international students' strategies for using Gen-AI in writing their Master or PhD dissertations?

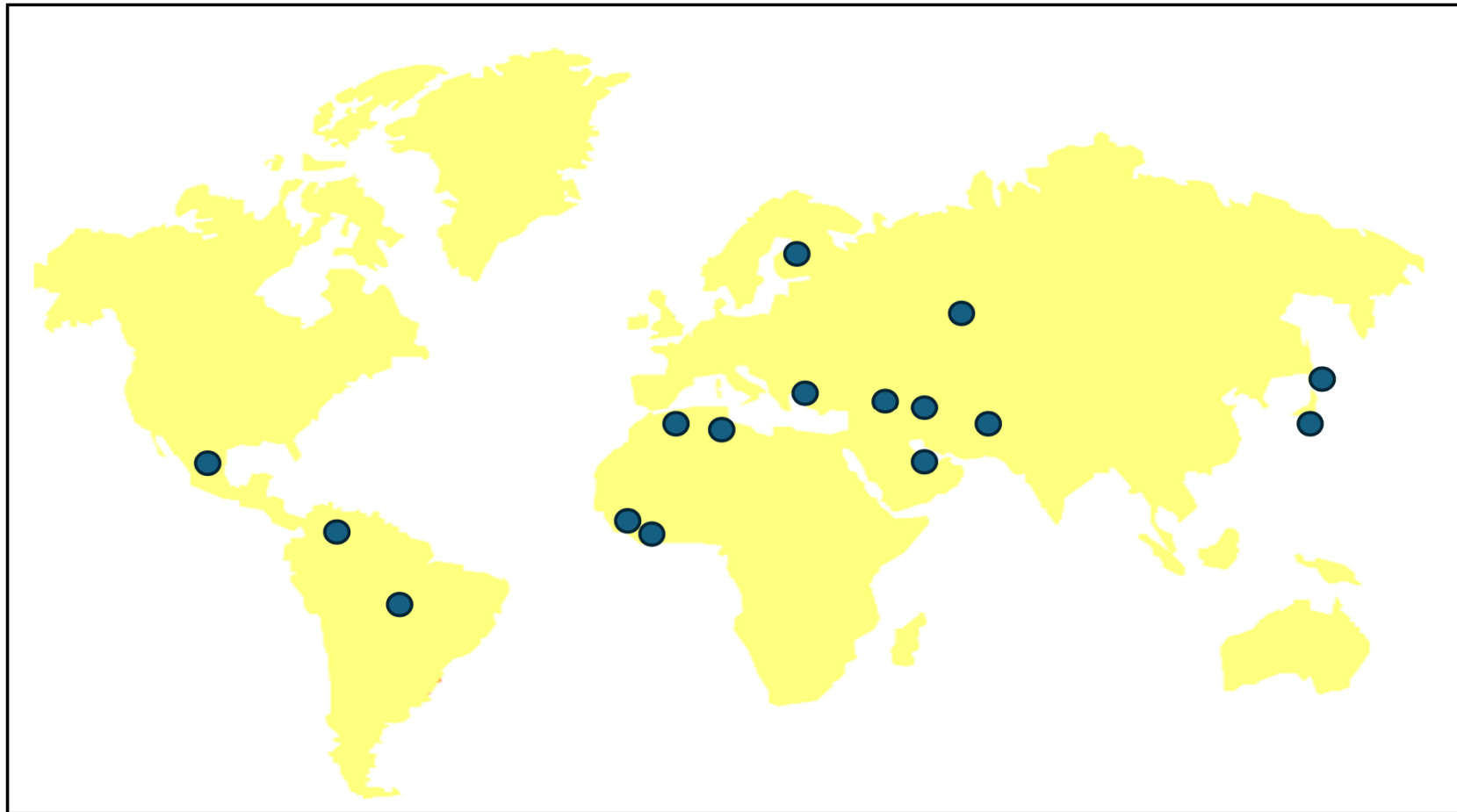
Origin of international students at CPU as of June 2024

| Continents | % | Some origins of students |
|-------------------------------|----------|-------------------------------------------------------------------------------------------|
| Europe (14 countries) | 16% | Albania (4%), Spain (2%), Ukraine (1%) |
| Far East (12 countries) | 37% | China (19%), Taiwan (3%), South Korea (2%), Japan (3%), Vietnam (5%), India (4%) |
| Middle East (11 countries) | 16% | Afghanistan (6%), Iraq (1%), Iran (4%), Syria (4%), Saudi Arabia 2%, Lebanon 2% |
| Africa (19 countries) | 14% | Algeria (2%), Soudan (2%), Egypt (2%) |
| America (11 countries) | 14% | Brazil (2%), Colombia (4%), Mexico (2%), Peru (1%) |

Percentage of website ranked by languages

| Language Name | Number of Speakers | Website Percentage |
|----------------------|---------------------------|---------------------------|
| English | 1,500,000,000 | 55.5% |
| Mandarin Chinese | 1,100,000,000 | 2.8% |
| Spanish | 460,000,000 | 4.9% |
| French | 280,000,000 | 4.1% |
| Arabic | 310,000,000 | 3.3% |
| Russian | 258,000,000 | 0.8% |
| Portuguese | 220,000,000 | 2.6% |
| German | 90,000,000 | 2.0% |

Origin of interviewees



Extreme positions

- **1 – Strict ethical position**

- *“By principle, I don’t want to use Gen-AI because this is cheating and plagiarism, and the produced text is not mine.”*

- **2 – Towards AI-augmented humans**

- *“I can no longer live without chatbots because they are a valuable help to me.”*

Francisca's case

- Francisca is a Venezuelan student in economics and she has to write her master's dissertation in English, but the viva voce examen will be in French
- Using Gen-AI for
 - Text understanding (reformulation)
 - Text translation
 - Understanding of sophisticated concepts and words
 - Help for writing in English
 - Oral assistance in French

Sepideh's case

- She is an Afghan student in finance. She wrote her Master dissertation in English.
- Speaking various languages of Central Asia
- Different corpora of languages
- Afraid of confidentiality

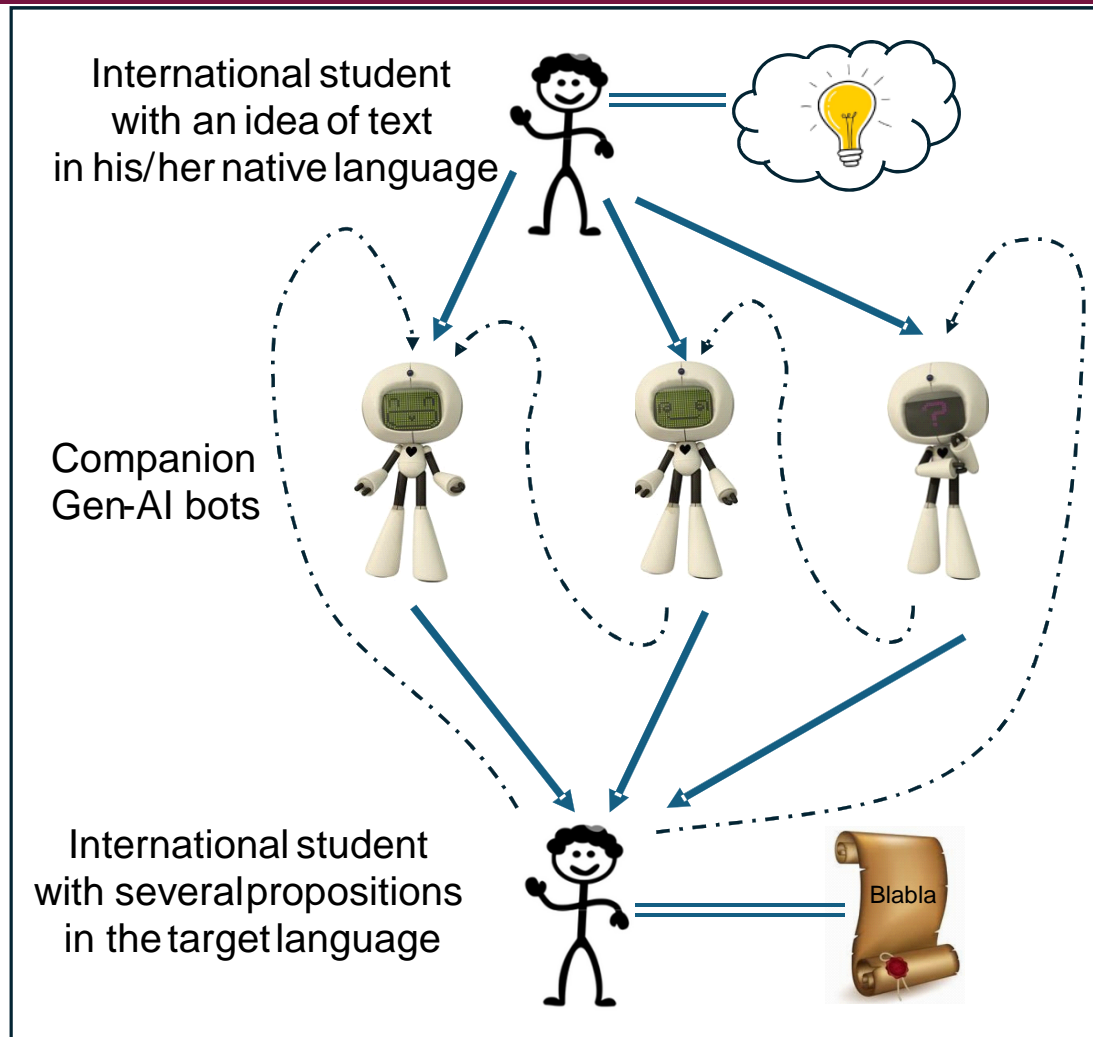
Dimitri's case

- Dimitri is a Russian student of fine arts. “I have a poor command of French (B2) and very poor English (B1). I am wary of Gen-AI systems because they sometimes deliver totally or partially false information. When I stumble on a word or phrase, I look for synonyms or quotes using them. In addition, I use chatbots to polish my French and English, and to understand grammar.
- For my bibliographic search, once I received two references, say Author#1, Title#1, and Author#2, Title#2. After checking, I discovered that the reality was Author#1, Title#2, and Author#2, Title#1: the titles had been reversed! So, having found that references were fanciful or absent, I prefer the classic way of search engines (Google, Qwant, Duckduckgo, etc.) by adding keywords.

Other cases

- Adama (Guinea, Laws): mother language is Fulani
- Mohammed (Iraq, Political Sciences) used ChatGPT to generate draft slides
- Luisa (Brazil) : mails; using different chatbots and comparing results

Strategies



International students' profiles

- Profile 1: good in French, good in English
- Profile 2: good in French, bad in English
- Profile 3: bad in French, good in English
- Profile 4: bad in French, bad in English
- Profile 5: good in native language, good in French
- Profile 6: good in native language, bad in French.

Suggestions for students

- BP1: remember that the scope of a research dissertation is to produce and validate novel knowledge, whereas a GenAI product will generative a text based on already published knowledge.
- BP2: do not use a GenAI product to generate a whole dissertation; in general, the obtained text is trivial.
- BP3: as soon as a text is AI generated, check and double-check it to remove hallucinations and fake information.
- BP4: regarding bibliography, GenAI can be of assistance for the beginning, but after never use a GenAI software to create a relevant bibliography; use instead search engines with Boolean conditions.
- BP5: when you get an interesting paper, generate a summary by GenAI software and translate it into your native language to test whether it really concerns your research questions.

Suggestions for students

- BP6: if you suspect misinformation, hallucinations or fake news, you are demanded to check and double check.
- BP7: when asking for scientific references to a Gen-AI bot, verify their quality and prioritize those that undergo rigorous quality control.
- BP8: feel free to employ multiple chatbots to gain diverse perspectives.
- BP9: do not look for innovative suggestions from chatbots, because they are based on existing corpora.
- BP10: please mention explicitly that you are using a chatbot in your dissertation.

Suggestions for international students

- BP11: if you don't have good command either in English or in French, write initially your text with your native language, and then launch a translation. Again, check and double-check especially if there are words or expressions you do not understand.
- BP12: if you are at B2/C1 level, write a first version directly in French, and ask for reformulation; you will increase your vocabulary.
- BP13; do not hesitate to ask the same question in different chatbots, in different languages and at different dates; each answer will provide additional insights.
- BP14: if you are hesitant about a verb tense, use a conjugation software.
- BP15: if the answer is full of sophisticated words, launch a reformulation for replacing them.
- BP16: if the answer contains unknown words, check their meaning and their pronunciation.
- BP17: while the short-term objective is to write a successful dissertation, do not forget that the long-term objective is to be

Suggestions for Chatbots developers

- SG1: propose to provide answers with simple words and simple grammar.
- SG2: if the prompt is not grammatically correct, propose to polish it and to explain simply why this is not correct.
- SG3: provide translation to/from all official languages (f.i. Albanian, Fulani, etc.).
- SG4: provide a functionality to check a text and a translation (perhaps coming from another Gen-AI bot) to explain the choices made by the translators.
- SG5: in discussions, consider chats using different languages in different queries on the same topic (multilingual discussion).
- SG6: unveil the key-aspects and requirements towards multi-bot interoperability.

Conclusions

- International students use extensively chatbots for translations, reformulations, clarification of concepts
- Not for generating their whole dissertations! But only a few paragraphs
- Always using different bots
- So-so regarding references
- Open questions concerning chatbot developers
 - Languages with few locutors?
 - Mixing several languages in a same chat?
 - Interoperability of chatbots?

Thanks for your attention!
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Can be downloaded from
www.laurini.net/ftp/Porto2.pdf

