# Ahana Chattopadhyay

17 Avenue Foch, Nancy, 54000, France

📳 (+33) 6 87 53 96 53 | 💌 ahanapratyay@gmail.com | 🖸 AhanaChattopadhyay | 🛅 linkedin.com/in/ahana-chattopadhyay-509815226 | 🏻 ahanachattopadhyay.github.io

## **Profile**

Currently a student in Master 2 NLP at IDMC, I am interested in several areas of natural language processing, such as formal semantics, knowledge graphs, machine learning and computational linguistics. I want to pursue a PhD after my master's degree in order to deepen my knowledge in these exciting fields, participating in innovative projects contributing to technological advancement.

## Education

#### IDMC, University of Lorraine

Nancy, France

September 2023 - Present

Master in Natural Language Processing

- Obtained a score of 15.171/20 in Master 1 and 13.39/20 in the 3rd semester
- Selected for the 2024-25 Orion Excellence Scholarship
- Courses: Machine Learning, Semantic Web, Data Science, Corpora for Speech, Corpus for Writing, Data Structure and Algorithms, Python Programming, Formal Language, Computability and Complexity, Formal Semantics, Logic, Probability and Statistics, Lexicology, Syntax, Morphology, Phonetics, Project Management, Neural Networks, Languages with Low Resources, Dialogue, Chatbot and Q&A Systems, Semantics and Discourse, Speech Recognition and Synthesis, Signal Processing, Ontology, Pragmatics, Terminology

#### Chandernagore Government College

Chandernagore, India

June 2019 – June 2022

First in the ranking

Bachelor's degree in French

- Obtained a grade of 8.89/10 overall average
- Selected as a student representative for a guided tour of Chandernagore for French delegates and students

#### Foreign Language Courses

Kolkata, India

Alliance Française du Bengale, Instituto Cervantes de Delhi, KCLC Kolkata

- · French courses from A1 to B2 at the AFDB
- Private French lessons with a native teacher for DALF C2 preparation
- Online Spanish Courses from A1 to A2
- Korean courses from A1 to B2 at KCLC
- $\bullet\,$  Private Korean lessons for preparation for the official TOPIK II exam

October 2019 – June 2021 June 2021 – January 2023

December 2020 – April 2021

October 2018 – July 2021

August 2021 – August 2023

#### Translator's Factory - from French to Bengali

French Institute of India

- · Literary translation training
- Among the 12 successful candidates, from India and Bangladesh, I was one of them.
- The work chosen for translation: First Blood by Amélie Nothomb (Renaudot Prize)
- Trainer: Philippe Benoit, teacher of Bengali and Sanskrit at INALCO (Paris)

### Chandernagore, India

March 2022 – November 2022

#### Baccalaureate and afterwards

Chandarnagore Banga Vidyalaya (High School)

- Baccalaureate (12th board examination), scientific section, with honors
- Preparation for the medical school entrance exam (NEET)

Chandernagore, India

May 2016

May 2016 - June 2019

## **Academic Projects**

#### **Ethics Therapy Project (unsupervised)**

University of Lorraine

Nancy, France

September 2023 – January 2024

- Sexist Language Text Style Detection and Transfer in Social Media Comments
- · Models: SVM TF-IDF, RoBERTa, DeBERTa, BiLSTM, BART, Switch
- Manual annotation
- Website: https://etp-23.github.io/

#### Knowledge Graph Extraction (supervised)

University of Lorraine

- · From clinical trial descriptions
- Using the Mixtral 8x7b model
- · Manual evaluation of RDF graphs

## Nancy, France

September 2023 – May 2024

#### Construction of a corpus of speech (solo)

University of Lorraine

- For the purpose of studying the impact of position on formants
- · Manual annotation
- · Statistics tests

#### Nancy, France

April 2024 – May 2024

#### Analysis of data collected from Wikipedia (in group)

University of Lorraine

- From the bibliographies of sculptors and computer scientists
- Using the KMeans algorithm for clustering
- Exploitation of the Spacy and Stanza libraries for data analysis

#### Nancy, France

April 2024 - June 2024

#### Construction of a knowledge graph (in group)

University of Lorraine

- · From UFO sighting reports
- · Developing an OWL Ontology
- · Querying RDF Triplets with SPARQL

#### Nancy, France

April 2024 – June 2024

#### Detection of greenwashing in French texts (in group)

University of Lorraine

- Translating the ClimateBERT dataset using the DeepL API
- Manual curation of a test dataset from environmental commitment reports from French companies
- Fine-tuning the Qwen model for greenwashing detection via cross-language transfer learning

#### Nancy, France

September 2024 – February 2025

# Professional experience

#### Internship: Investigations into the semantics of private adjectives

Intern at LORIA

Nancy, France

March 2025 – Present

- Propose a compositional treatment of private adjectives
- · Compare existing approaches
- Propose a new theoretical model and formalize this approach
- Technical tools: ACGtk, Overleaf etc.

#### Internship: Analysis of the relevance of lexical neighbours present in the French Lexical Network

Intern at ATILF

Part-time teacher

Nancy, France
July 2024 – August 2024

- · Theory and practice of lexicography
- Mastery of automatic corpus annotation tools
- Automatic lexical disambiguation
- Lexicographic tools: Inception, Dicet, Spiderlex
- Programming: Object-oriented in Python
- Internship report: https://perso.atilf.fr/sollinge/wp-content/uploads/sites/13/2025/04/Stage Ahana Copy.pdf

### Sister Nivedita University

Kolkata, India

• Beginner course in French for students from Bachelor's Degree to Master's Degree

- FOS course for hotel and restaurant students
- · Facilitation of conversational workshops
- Design of authentic documents for teaching
- Educational tools: TV5Monde, RFI, Kahoot, Power Point, Excel, Word etc.
- Soft Skills: Teamwork, Time Management, Communication, Creativity.

September 2022 - June 2023

French Goals Chandernagore, India

French tutor

January 2021 – September 2023

- Private French lessons at beginner level for children and adults
- Tutoring
- Design of educational videos on YouTube and educational files on Facebook and Instagram
- Educational tools: TV5Monde, RFI, Kahoot, Power Point, Excel, Word, Facebook, Instagram, YouTube, Active Presenter, Zoom, Canva etc.
- Website: <a href="https://sites.google.com/view/frenchgoals/home">https://sites.google.com/view/frenchgoals/home</a>

Online Freelancer Chandernagore, India

French-English translation

December 2021 - September 2023

· Translation of various documents

## Certification

DALF C2 Nancy, France

University of Lorraine June 2024

Certificate of Completion Nancy, France

Coursera April 2024

Machine Learning Specialization

· Training offered by DeepLearning.AI and Stanford University

Achievement Badge Chandernagore, India

Fun MOOC June 2023

· Python: from the fundamentals to the advanced concepts of the language

Training offered by the Université Côte d'Azur and INRIA

DALF C1 Kolkata, India

Alliance Française du Bengale October 2022

IELTS Academic Kolkata, India

IDP India December 2022

• Score 8/9

## Skills

**Programming** Python (Pandas, PyTorch, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow etc.), SQL, MongoDB, Scrapy, SPARQL, GraphDB

**Diverse**Shell (Ubuntu), L<sup>A</sup>TEX(Overleaf), Microsoft Office, Git, Praat, Trello, Canva, YouTube
Teamwork, Time management, Communication, Creativity, Problem solving

# Languages

Bengali Mother tongue

 French
 C2

 English
 C1

 Hindi
 B2-C1

 Korean
 B1 - B2

 Spanish
 A2