

Ahana Chattopadhyay

26 Rue Georges Pompidou, Lannion, 22300, France

☎ (+33) 6 87 53 96 53 | ✉ ahanapratyay@gmail.com | 📄 AhanaChattopadhyay | 🔗 [linkedin.com/in/ahana-chattopadhyay-509815226/](https://www.linkedin.com/in/ahana-chattopadhyay-509815226/) | 🌐 ahanachattopadhyay.github.io

Profile

Holder of a Master's degree in Natural Language Processing (Université de Lorraine – IDMC), I am starting a PhD at Orange on formal semantics approaches for conversation understanding. Passionate about the intersection of computational linguistics, artificial intelligence, and language models, I am particularly interested in meaning representations, formal semantics, and frugal approaches in NLP.

Education

IDMC, University of Lorraine

Master in Natural Language Processing

Nancy, France

September 2023 - August 2025

- Obtained a score of 15.171/20 in Master 1 and 15.195/20 in Master 2
- Selected for the ATALA grant for participation in the CORIA-TALN conference
- 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

Bachelor's degree in French

Chandernagore, India

June 2019 – June 2022

- First in the ranking
- 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

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

Kolkata, India

- 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
- 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

Chandernagore, India

March 2022 – November 2022

- 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)

Baccalaureate and afterwards

Chandarnagore Banga Vidyalaya (High School)

Chandernagore, India

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

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

- 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 report:** <https://hal.univ-lorraine.fr/hal-05248112>

Nancy, France

March 2025 – August 2025

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

Intern at ATILF

- 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

Nancy, France

July 2024 – August 2024

Sister Nivedita University

Part-time teacher

- 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.

Kolkata, India

September 2022 - June 2023

French Goals

French tutor

- 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:** <https://sites.google.com/view/frenchgoals/home>

Chandernagore, India

January 2021 – September 2023

Online Freelancer

French-English translation

- Translation of various documents

Chandernagore, India

December 2021 - September 2023

Publication

Ressources lexicales pour la sémantique : WordNet, BabelNet, PropBank, FrameNet, DBpedia et SUMO

Atelier 4AS (CORIA-TALN 2025)

Nancy, France

May 2025

Certification

DALF C2

University of Lorraine

Nancy, France

June 2024

Certificate of Completion

Coursera

- Machine Learning Specialization
- Training offered by DeepLearning.AI and Stanford University

Nancy, France

April 2024

Achievement Badge

Fun MOOC

- Python: from the fundamentals to the advanced concepts of the language
- Training offered by the Université Côte d'Azur and INRIA

Chandernagore, India

June 2023

DALF C1

Alliance Française du Bengale

Kolkata, India

October 2022

IELTS Academic

IDP India

- Score 8/9

Kolkata, India

December 2022

Skills

Programming

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

Diverse

Shell (Ubuntu), L^AT_EX(Overleaf), Microsoft Office, Git, Praat, Trello, Canva, YouTube, ACGtk

Soft Skills

Teamwork, Time management, Communication, Creativity, Problem solving

Languages

Bengali Mother tongue

French C2

English C1

Hindi B2-C1

Korean B1 – B2

Spanish A2

