Abhishek Agrawal
+33 620634027/+91 72761 94402 • abhishek-amit.AGRAWAL@univ-amu.fr

WORK EXPERIENCE

NLP Engineer   August 2020 – September 2022
Merck Sharpe & Dohme   *Prague, Czech Republic*

- Worked on a project called SDLC checker which automates the checking of SDLC documents as per some guidelines set out by the SDLC team with the help of machine learning and different rules.
- Added statistical models based on the SpaCy framework to the internal Named Entity Recognition (NER) API to recognize more entities.
- Designing a system similar to a Question & Answer system to help the internal CMC team quickly answer the questions posed by governmental regulatory agencies like the United States Food & Drug Administration, etc. by searching amongst various internal data sources.
- Implemented specific NER models to recognize entities in medical narratives thereby speeding up the process of recognizing inconsistencies in the narratives by specialists.
- Categorizing questions posed by healthcare professionals to the company regarding its products with topic modeling.
- Providing NLP consultancy by answering questions and working on Proof of Concept for different internal teams within the company for their use cases.

Machine Learning Intern   November 2018 – July 2020
Merck Sharpe & Dohme   *Prague, Czech Republic*

- Worked on a project called Privacy-Preserving Analytics which intends on preserving the privacy in documents circulated within the company via Confluence, Outlook, etc. with the help of Named Entity Recognition, rules, and machine learning.

Software Developer   August 2016 – June 2018
Barclays Technology Center   *Pune, India*

- Delivered the Enterprise Campaign Management System for Check Campaigns as a single page application and helped reduce the dependency on the old Campaign Desktop Tool.
- Worked on delivering the Enterprise Campaign Management System for Acquisition Campaigns. The acquisition campaigns generate around 80% of the revenue (Barclaycard US) in the United States of America.

EDUCATIONAL QUALIFICATIONS

- **Aix-Marseille Université; Marseille, France**   2022 - Till Date
  Ph.D. in Computational Linguistics & Cognitive Science

- **Charles University; Prague, Czech Republic**   2018 - 2020
  Mgr. in Computational Linguistics

- **Savitribai Phule Pune University; Pune, India**   2012 - 2016
  (Formerly University of Pune)
  B.E. in Computer Science
  First Class with Distinction

HONORS & SCHOLARSHIPS

- **Best Paper Award**   2020
  Awarded for the paper *"Eyes on the Parse: Using Gaze Features in
  Syntactic Parsing"* at the Second Workshop on Beyond Vision
  and LANguage: inTEgrating Real-world kNowledge (LANTERN)

- **Dean's Scholarship**   2019
  Awarded for excellent study results in the previous academic year
  at Charles University.

- **Computational Linguistics Scholarship**   2018 - 2020
  Awarded by the Faculty of Mathematics and Physics at Charles University
  to a highly qualified applicant.

- **Dhirubhai Ambani Undergraduate Scholarship**   2012 - 2016
  Awarded for standing 1st in Pune and 5th in Maharashtra in
  the HSC (10 + 2) exam.

- **Maharashtra Government Scholarship**   2012 - 2016
  Awarded for standing 1st in Pune and 5th in Maharashtra in
  the HSC (10 + 2) exam.

PUBLICATIONS

- **Agrawal, A.**, Favre, B., & Fourtassi, A. (under review). Analysing Communicative Intent Coordination in Child-Caregiver Interactions.
- **Agrawal, A.**, Nikolaus, M., Favre, B., & Fourtassi, A. (under review). Automatic Coding of Contingency in Child-Caregiver Conversations.
- Nikolaus, M., **Agrawal, A.**, Kaklamanis, P., Warstadt, A., & Fourtassi, A. (under review). Automatic Annotation of Grammaticality in Child-Caregiver Conversations.
- Goumri, D., **Agrawal, A.**, Nikolaus, M., Vu, T., Bodur, K., Semmar, E., Armand, C., Mazzocconi, C., Gupta, S., Prévot, L., Favre, B., Becerra, L., & Fourtassi, A. (under review). A Developmental Corpus

of Child-Caregiver's Face-to-face vs. Computer-mediated Conversations in Middle Childhood.

- **Agrawal, A.**, Liu, J., Bodur, K., Favre, B., & Fourtassi, A. (2023). Development of Multimodal Turn Coordination in Conversations: Evidence for Adult-like Behavior in Middle Childhood. *In Proceedings of the 45th Annual Meeting of the Cognitive Science Society.*
- **Agrawal, A.** & Rosa, R. (2020). Eyes on the Parse: Using Gaze Features in Syntactic Parsing. *Proceedings of the Second Workshop on Beyond Vision and LANguage: inTEgrating Real-world kNowledge (LANTERN).*
- Sugandhi, R., Pande, A., **Agrawal, A.**, & Bhagat, H. (2016). Automatic Monitoring and Prevention of Cyberbullying. *International Journal of Computer Applications.*
- Sugandhi, R., Pande, A., Chawla, S., **Agrawal, A.**, & Bhagat, H. (2015). Methods for detection of cyberbullying: A survey. *15th International Conference on Intelligent Systems Design and Applications (ISDA).*

THESIS

- Abhishek Agrawal. *Eye-tracking features in syntactic parsing.* Master's Thesis. Charles University. 2020.

SUMMER SCHOOLS

- Participant - Lisbon Machine Learning Summer School (LxMLS) 2023
- Participant - ILCB Summer School 2022, 2023

LANGUAGES

- English   Native-level
- Hindi   First language
- Marathi   Written and Oral proficiency
- German   Basic A2 level
- French   Basic A2 level

SKILLS

- **Programming Languages:** Python, Java, HTML, Javascript

- **Machine Learning Frameworks:** Tensorflow, Pytorch, Keras, Scikit-learn, Spacy
- **Other:** Angular 1.5, CSS, Springboot