Hanna Abi Akl

+33618086784 | hanna.abi-akl@inria.fr | https://hannaabiakl.github.io/

In LinkedIn | ☐ GitHub | ☐ ORCID | ← Google Scholar

Paris, 75005, France

SUMMARY

I am a PhD student in logic, language and computation at INRIA. My research interests include neuro-symbolic artificial intelligence, knowledge representation, knowledge graphs, ontologies, natural language processing and the semantic web. I am currently working on neuro-symbolic and knowledge-based approaches for reasoning abilities in Large Language Models. I also teach at Data Science Tech Institute and Sciences Po.

Professional Experience

• SciencesPo Paris School of International Affairs [

08/2024 - Current

Adjunct Instructor

Paris, France

· Teaching activities: Programming, Databases, and Machine Learning Foundations for Decision-Makers, Cloud Computing

02/2023 - Current External Scientific Collaborator Nice, France

- Member of the WIMMICS team
- PhD thesis supervision on triplet relation extraction using NLP and Semantic Web methodologies
- Testing and validation of the KGStat tutorial project based on Machine Learning techniques using Semantic Web

Data ScienceTech Institute School of Engineering [)

02/2023 - Current Paris, France

Vice-Dean and Chief Academic Officer

- Teaching activities: Clean IT, Software Engineering, Machine Learning Labs, Artificial Neural Networks, Deep Learning, Amazon Web Services, Data Wrangling with SQL
- Preparation of Faculty Seminars and scientific programme reviews
- Improvement of programme structure and evaluation (Bachelors and Masters level)
- Responsible for faculty recruitment interviews

• Yseop [**(** 04/2019 - 02/2023

Data Scientist and Machine Learning Engineer

Paris, France

- · Identification and prototyping of artificial intelligence use cases using machine and deep learning techniques
- Design and integration of artificial intelligence tools in existing product from text corpora, APIs, business ontologies and knowledge graphs

Data ScienceTech Institute School of Engineering []

09/2021 - 02/2023

Paris, France

Course Instructor

Data Consult []

Teaching activities: Clean IT, Software Engineering, Machine Learning Labs

Data ScienceTech Institute School of Engineering []

01/2019 - 04/2019

Private Tutor

Paris, France

• Preparing students for the "AWS Certified Solutions Architect - Associate" certification exam

Data Integration Engineer

06/2015 - 08/2018

• Configuration, maintenance and customization of cloud applications

Beirut, Lebanon

- · High-level analysis and smart data reporting through API and chatbot software integration
- Implementation of first Smart City solution in Lebanon
- Presentation of data augmentation platform at the Mobile World Congress (MWC)

 Touch [] 07/2014 - 08/2014 Site Implementation and Maintenance (SI&M) Engineering Intern Beirut, Lebanon

Theoretical research on the development and advancement of 4G technology

American University of Beirut []

06/2012 - 12/2013 Beirut, Lebanon

· Benchmarking and optimization of Alaoui filter and integrator model parameters in Matlab

American University of Beirut []

09/2011 - 09/2015

Private Tutor

Research Assistant

Beirut, Lebanon

Teaching middle school and high school subjects

INRIA - Université Côte d'Azur

01/2025 - Current Nice, France

PhD, Computer Science

- Topic: Neuro-symbolic and knowledge-based approaches for reasoning in Large Language Models
- Supervision: Fabien Gandon, Catherine Faron, Pierre Monnin
- · Keywords: Logical Reasoning, Neuro-symbolic Artificial Intelligence, Knowledge Graphs, Ontologies, Natural Language Processing, Semantic Web
- Summer Schools: ESSAI 2025, Reasoning Web 2025

Quantic School of Business and Technology

12/2024 - 06/2026

Washington, DC, United States of America

Executive MBA o GPA: 4.0/4.0

Awarded the France Leadership scholarship

• Université Côte d'Azur

12/2023 - 07/2024

Nice, France

Master, Computer Science

o GPA: 4.0/4.0

• Awarded full completion by the Validation d'Acquis par Expérience (VAE)

Data ScienceTech Institute School of Engineering

10/2018 - 09/2019

M.Sc., Data Science and Artificial Intelligence

Paris, France

o GPA: 4.0/4.0

- Graduated Summa Cum Laude
- Awarded Second prize at HackBordeaux 2019 Cappemini challenge for the FuelMi application

American University of Beirut

09/2011 - 05/2015 Beirut, Lebanon

B.E., Computer and Communications Engineering

Dean's Honor List: Spring Semester 2015

- Awarded Second prize in the National Instruments elevator design challenge
- Recipient of the Philippe Jabre Association scholarship for excellence

• Collège Notre Dame de Jamhour

09/1998 - 06/2011

High School Diploma, General Sciences

Beirut, Lebanon

- Ranked in top 10% of cohort (300 students)
- High Distinction in the French Baccalaureate
- High Distinction in the Lebanese Baccalaureate
- Recipient of the Carlos Ghosn scholarship for excellence

PATENTS AND PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [S.1] Hanna Abi Akl, et al (2025). Investigating Language Model Capabilities to Represent and Process Formal Knowledge: A Preliminary Study to Assist Ontology Engineering. In the International Joint Conference on Rules and Reasoning (RuleML+RR) 2025 Doctoral Consortium.
- [C.17] Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2025). Kastor: Fine-tuned Small Language Models for Shape-based Active Relation Extraction. In European Semantic Web Conference, pp. 94-115. Springer, Cham. DOI: 10.1007/978-3-031-94575-5_6.
- [J.4]Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2025). Extensive Benchmark of Small Language Models for Datatype Properties Extraction and RDF Knowledge Graph **Generation**. Manuscript submitted for publication in *Semantic Web*.
- [P.3] Hanna Abi Akl, Hugues de Mazancourt, Dominique Mariko (2024). Ontology mapping and adaptation systems and methods. U.S. Patent Office, Patent No. 12,106,049. Publication Date: 01 October 2024.
- [C.16] Hanna Abi Akl, et al (2024). Knowledge Graphs can play together: Addressing knowledge graph alignment from ontologies in the biomedical domain. In Proceedings of the 16th International Conference on Knowledge Discovery and Information Retrieval (KDIR 2024), pp. 416-423. DOI: 10.5220/0013015800003838.
- [C.15] Hanna Abi Akl (2024). Project SHADOW: Symbolic Higher-order Associative Deductive reasoning On Wikidata using LM probing. In Proceedings of the 10th International Conference on Natural Language Computing (NATL 2024).
- [C.14] Hanna Abi Akl (2024). DSTI at LLMs4OL 2024 Task A: Intrinsic versus extrinsic knowledge for type classification. In Open Conference Proceedings, pp. 93-101. DOI: https://doi.org/10.52825/ocp.v4i.2492.
- Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2024). Learning Pattern-Based Extractors from Natural Language and Knowledge Graphs Applying Large Language Models to Wikipedia & the Linked Open Data. In Proceedings of the AAAI Conference on Artificial Intelligence, pp. 23411-23412. DOI: https://doi.org/10.1609/aaai.v38i21.30406.

- [C.12] Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2024). 12 shades of RDF: Impact of Syntaxes on Data Extraction with Language Models. In European Semantic Web Conference, pp. 81-91. Springer, Cham. DOI: https://doi.org/10.1007/978-3-031-78952-6_8.
- [C.11] Hanna Abi Akl (2024). NeSy is alive and well: A LLM-driven symbolic approach for better code comment data generation and classification. In Joint Proceedings of the ESWC 2024 Workshops and Tutorials co-located with 21th European Semantic Web Conference (ESWC 2024).
- [C.10] Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2024). Well-written knowledge graphs: most effective RDF syntaxes for triple linearization in end-to-end extraction of **relations from texts**. In *Proceedings of the AAAI Conference on Artificial Intelligence*, pp. 23631-23632. DOI: https://doi.org/10.1609/aaai.v38i21.30502.
- [C.9] Hanna Abi Akl (2023). PSYCHIC: A Neuro-Symbolic Framework for Knowledge Graph **Question-Answering Grounding.** In Joint Proceedings of Scholarly QALD 2023 and SemREC 2023 co-located with 22nd International Semantic Web Conference (ISWC 2023).
- Hanna Abi Akl (2023). A ML-LLM pairing for better code comment classification. In FIRE (Forum for [C.8] Information Retrieval Evaluation).
- Célian Ringwald, Fabien Gandon, Catherine Faron, Franck Michel, Hanna Abi Akl (2023). Learning RDF [C.7] pattern extractors from natural language and knowledge graphs-application to Wikipedia and the LOD. In Proceedings of the AAAI Conference on Artificial Intelligence. DOI: https://doi.org/10.1609/aaai.v38i21.30406.
- Hanna Abi Akl, Hugues de Mazancourt, Dominique Mariko, Valentin Pierart (2023). Systems and methods [P.2] for measuring automatability of report generation using a natural language generation system. U.S. Patent Office, Patent No. 11,734,517. Publication Date: 22 August 2023.
- [C.6] Hanna Abi Akl (2023). The Path to Autonomous Learners. In Science and Information Conference, pp. 808-830. DOI: https://doi.org/10.1007/978-3-031-37717-4_52.
- [P.1] Dominique Mariko, Hanna Abi Akl, Hugues de Mazancourt (2022). Techniques for generating natural language text customized to linguistic preferences of a user. U.S. Patent Office, Patent No. 11,501,088. Publication Date: 15 November 2022.
- Rami Bou Khalil, Ramez Dagher, Myriam Zarzour, Ghassan Sleilaty, Hanna Abi Akl, et al (2022). The impact [J.3]of lockdown and other stressors during the COVID-19 pandemic on depression and anxiety in a Lebanese opportunistic sample: an online cross-sectional survey. In Current Psychology, pp. 1-11. DOI: https://doi.org/10.1007/s12144-021-02644-0.
- [C.5] Hanna Abi Akl, et al (2021). Yseop at FinSim-3 Shared Task 2021: Specializing Financial Domain Learning with Phrase Representations. In Proceedings of the Third Workshop on Financial Technology and Natural Language Processing, pp. 52–57.
- [C.4] Anubhav Gupta, Hanna Abi Akl, et al (2021). Not all titles are created equal: Financial document structure **extraction shared task.** In Proceedings of the 3rd Financial Narrative Processing Workshop, pp. 86-88.
- [C.3] Hanna Abi Akl, et al (2020). Yseop at SemEval-2020 Task 5: Cascaded BERT Language Model for **Counterfactual Statement Analysis**. In *Proceedings of the Fourteenth Workshop on Semantic Evaluation*, pp. 468-478.
- [J.2]Hanna Abi Akl, et al (2020). SemEval-2020 Task 5: Detecting Counterfactuals by Disambiguation. In arXiv preprint arXiv:2005.08519.
- [J.1]Dominique Mariko, Estelle Labidurie, Yagmur Ozturk, Hanna Abi Akl, et al (2020). Data Processing and Annotation Schemes for FinCausal Shared Task. In arXiv preprint arXiv:2012.02498.
- [C.2] Dominique Mariko, Hanna Abi Akl, et al (2020). Financial Document Causality Detection Shared Task (FinCausal 2020). In Proceedings of the 1st Joint Workshop on Financial Narrative Processing and MultiLing Financial Summarisation, pp. 23-32.
- [C.1] Hanna Abi Akl, Anubhav Gupta, Dominique Mariko (2019). Fintoc-2019 shared task: Finding title in text blocks. In Proceedings of the Second Financial Narrative Processing Workshop (FNP 2019), pp. 58-62.

D=DATA, P=PROJECT, S=SOFTWARE

• [S.9] SHADOW: LM-probing model for triple completion on Wikidata

2024 $[\mathbf{O}]$

Tools: Python, SPARQL, Wikidata, Knowledge Graphs, Deep Learning, Hugging Face

• Fine-tuned model on data

PROJECTS

Publicly released on Hugging Face

• [S.8] FLAN-T5 small-WordNet: WordNet term classification with Wikidata semantic information

2024

Tools: Python, SPARQL, Wikidata, Knowledge Graphs, Deep Learning, Hugging Face

Created semantic embedding vectors

• Extracted Wikidata semantic information

• Fine-tuned model on data	
Publicly released on Hugging Face	
• [S.7] FLAN-T5 small-GeoNames: GeoNames term classification with Wikidata semantic information Tools: Python, SPARQL, Wikidata, Knowledge Graphs, Deep Learning, Hugging Face • Extracted Wikidata semantic information	2024 [೧]
Created semantic embedding vectors	
∘ Fine-tuned model on data	
Publicly released on Hugging Face	
• [D.5] WordNet Semantic Primes: Enriching WordNet data with Wikidata Tools: Python, SPARQL, MongoDB, Wikidata, Hugging Face • Created scripts to query Wikidata Knowledge Graph information	2024 [?]
Vectorized Knowledge Graph information	
 Configured MongoDB to store and index vectors Publicly released on Hugging Face	
• [D.4] GeoNames Semantic Primes: Enriching GeoNames data with Wikidata Tools: Python, SPARQL, MongoDB, Wikidata, Hugging Face • Created scripts to query Wikidata Knowledge Graph information	2024 [?]
• Vectorized Knowledge Graph information	
• Configured MongoDB to store and index vectors	
Publicly released on Hugging Face	
• [P.5] KGstat: Knowledge Graph querying and machine learning modeling on data Tools: Python, R, SPARQL, Knowledge Graphs, Machine Learning • Applied statistical analysis for classification and regression cases on Knowledge Graph data	2023 [?]
Proposed machine learning models for improving classification and regression performance	
• Evaluated used metrics for classification and regression	
• [S.6] PSYCHIC: Question-answering neuro-symbolic model on knowledge graphs with SPARQL Tools: Python, SPARQL, Knowledge Graphs, Deep Learning, Hugging Face • Fine-tuned model on data • Publicly released on Hugging Face	2023 [?]
• [S.5] Text Smoothing: Generative model for financial text rewriting	2022
Tools: Python, Deep Learning, Hugging Face • Created scripts for scraping and cleaning data pipeline	[0]
Tested model zero-shot configurations	
Publicly released on Hugging Face	
• [S.4] Complete FNP T5 Data2Text: Complete T5-base data to text model specialized for finance NLG Tools: Python, Deep Learning, Hugging Face • Created scripts for scraping and cleaning data pipeline	2022 [?]
Re-trained model on data	
Publicly released on Hugging Face	
• [S.3] Simple FNP T5 Data2Text: Simple T5-base data to text model specialized for finance NLG Tools: Python, Deep Learning, Hugging Face • Created scripts for scraping and cleaning data pipeline	2022 [?]
∘ Fine-tuned model on data	
Publicly released on Hugging Face	
• [D.3] FNP 2022 FinCausal: Data set for the FinCausal 2022 shared task Tools: Python • Performed data curation	2022 [?]
Participated in inter-annotator agreement sessions	
• Created baseline models and scoring scripts	
• [S.2] FinISH: Financial term classification model for domain ontology classes	2021
Tools: Python, Ontologies, Deep Learning, Hugging Face • Created scripts for scraping and cleaning FIBO ontology	[0]
 Augmented financial ontology terms with definitions Fine-tuned model on data 	

Publicly released on Hugging Face	
• [S.1] Financial Relation Extraction: Classification model for type of relations in financial sentences Tools: Python, Deep Learning, Hugging Face • Created scripts for scraping and cleaning financial data pipeline	2021 [?]
• Extracted and normalized financial relations	
∘ Fine-tuned model on data	
• Publicly released on Hugging Face	
 [D.2] FNP 2021 FinCausal: Data set for the FinCausal 2021 shared task <i>Tools: Python</i> Performed data curation Participated in inter-annotator agreement sessions Created baseline models and scoring scripts 	2021 [?]
• [D.1] FNP 2020 FinCausal: Data set for the FinCausal 2020 shared task Tools: Python • Performed data curation • Participated in inter-annotator agreement sessions • Created baseline models and scoring scripts	2020 [①]
 [P.4] FuelMi: The pet that takes care of you Tools: Python Designed application concept and intent Implemented Python back-end functionalities for health and activity management Pitched in front of live jury 	2019 [?]
 [P.3] Lebanon Smart City Experience: First smart city in Lebanon at BeitMisk <i>Tools: Air Quality Sensors, Node-Red, PHP, MySQL, HTML5, MTTQ Protocol, Server-Side JavaScript</i> Maintained and queried sensor log data in MySQL database Created PHP query scripts to provide data insights for monitoring dashboard Updated HTML5 dashboard with insights on consumption tracking Developed custom Facebook chatbot with Node-Red and Watson NLP toolkit 	2017 [?]
• [P.2] Ticketing System: Customizing Service Delivery Tools: Oracle RightNow Service Cloud, PHP, HTML5, CSS, JavaScript, ROQL, Google Scripts, Google Sheets • Implemented and configured ticketing system • Managed user access and administration • Created custom workflows for internal use • Created and enabled custom views and reports • Managed and customized web portal with HTML5, CSS and JavaScript • Created custom project management time sheet with Google Sheets back-end and Google Scripts • Maintained PHP scripts for updated ROQL real-time queries and ticket views	2016 [•]
• [P.1] Sales CRM System: Improving Customer Relationship Management Experience Tools: Oracle Sales Cloud, Groovy scripting, Microsoft Dynamics • Performed migration from Microsoft Dynamics to Oracle Sales Cloud • Created custom views for users • Managed user access and adlinistration • Setup Single sign-on (SSO) with LDAP between Microsoft Active Directory and Oracle • Created custom workflows and scripts for internal behavior	2016 [?]

SUPERVISION M=M.Sc., P=PHD

• [M.3] Claire Davat, Albin Brogialdi, Marius Akre, Florian Irrien, Luc Sagnes

Data ScienceTech Institute School of Engineering

11/2024 - 04/2025

- Supervised DIRISI Hackathon project: "L'Intelligence Artificielle au cœur des réseaux"
- Ranked Second in the challenge

• [M.2] Jannic Cutura

06/2023 - 11/2023

Data ScienceTech Institute School of Engineering



- Supervised "Deep Learning" research project: Breaking the U: Asymmetric U-Net for Object Recognition in Muon Tomography
- Ranked Fourth in the IEEE BigData 2023 Cup: Object Recognition with Muon Tomography using Cosmic Rays challenge
- Paper publication in IEEE Conference Proceedings

• [P.1] Célian Ringwald

12/2022 - Current

Université Côte d'Azur, Inria, CNRS, I3S

• Supervised PhD thesis "Learning RDF pattern extractors for a language from dual Wikipedia/LOD databases"

• [M.1] Jannic Cutura

12/2022 - 04/2023

Data ScienceTech Institute School of Engineering

- · Supervised "Python Machine Learning Labs" research project: Web Intelligence Deduplication challenge
- Ranked First (reproducibility) and Second (accuracy) in the EuropeanStatisticsAwards challenge
- o Prize money: 14,000 euros

SKILLS

- Programming Languages: Python, C, C++, Java, JavaScript, PHP, HTML5, CSS3
- Web Technologies: RDF, RDFS, OWL, SPARQL
- Database Systems: Microsoft SQL Server, MySQL, PostgreSQL, MongoDB, Neo4j
- Data Science & Machine Learning: Classification, Regression, Clustering, Reinforcement Learning
- Cloud Technologies: Amazon Web Services
- DevOps & Version Control: Git, SVN
- Specialized Area: Natural Language Processing, Knowledge Graphs, Computational Linguistics
- Mathematical & Statistical Tools: Matlab, Latex

Second for the FuelMi health application

- Other Tools & Technologies: Docker, Windows, Linux (bash scripting)
- Project Management: Agile methods (Scrum), Test-Driven Development

HONORS AND AWARDS	
• Second Place in the LLMs4OL challenge International Semantic Web Conference (ISWC) ○ Second in F1 score (97.16%) in SubTask A.1 (FS) - Term Typing - Wordnet	2024 [�]
• Third Place in the Scholarly-QALD challenge International Semantic Web Conference (ISWC) ◦ Third in F1 score (71.00%) in DBLP-QuAD Entity Linking	2023 [�]
• Second Place in the IRSE shared task FIRE: Forum for Information Retrieval Evaluation • Second in F1 score increase (+1.5%)	2023 [�]
 Company Core Values Award Q3 Trust <i>Yseop</i> Chosen by colleagues (80 employees) 	2022 [�]
• Second place in the FinSim-3 shared task FinNLP • Second in Mean Rank (1.141) and Accuracy (91.70%) scores	2021 [�]
 Company Core Values Award Q1 Innovation Yseop Chosen by colleagues (80 employees) 	2021 [�]
• Second Place in the HackBordeaux Capgemini challenge Enseirb - Matmeca	2019 [⊕]

• Second Place in the National Instruments Elevator Competition American University of Beirut	2011 [()]
Second in the Elevator Competition design challenge	[••]
• Finalist in the International College School Poetry Competition	2010
International College • Finalist among 300 national participants	[🏶]
	2011-2015
American University of Beirut • Recipient for academic excellence	[🏶]
	1997-2011
Collège Notre Dame de Jamhour • Recipient for academic excellence	[🗘]
SCIENTIFIC ACTIVITIES C=Conference, J=Journal, S=Special Session, T=Track, W=	WORKSHOP
• [T.2] Industry Track at EMNLP Reviewer	2025 [①]
• [J.2] Engineering Applications of Artificial Intelligence	2025
Reviewer	(
• [W.13] Assessing World Models: Methods and Metrics for Evaluating Understanding workshop at ICML Reviewer	2025 [(
• [W.12] 19th International workshop on Neural-Symbolic Learning and Reasoning (NeSy) Reviewer	2025 [①]
• [W.11] Representational Alignment workshop at ICLR	2025
Reviewer	[()]
• [J.1] Neurosymbolic Artificial Intelligence Reviewer	2025 [(
• [C.6] 3nd World Conference on eXplainable Artificial Intelligence (XAI)	2025
• [T.1] Industry Track at EMNLP	[①] 2024
Reviewer	[•]
• [W.10] NeurIPS workshop on Behavioral Machine Learning Reviewer	2024 [()]
• [S.1] Harmonising Generative AI and Semantic Web Technologies at ISWC	2024
Programme Committee	[()
• [W.9] Large Language Models and Cognition workshop at ICML Reviewer	2024 [()]
• [C.5] 4th International Conference on NLP & Data Mining (NLDM) Programme Committee	2024 [()]
• [C.4] 10th International Conference on Computer Science and Information Technology (CSTY)	2024
Programme Committee • [C.3] 2nd World Conference on eXplainable Artificial Intelligence (XAI)	[①] 2024
Programme Committee	[🗘]
• [C.2] 5th International conference on Advanced Natural Language Processing (AdNLP) Programme Committee	2024 [()]
• [W.8] 18th International workshop on Neural-Symbolic Learning and Reasoning (NeSy)	2024
Programme Committee	[()
• [C.1] 2nd International Conference on NLP & AI (NLPAI) Programme Committee	2024 [()]
• [W.7] Neuro-Symbolic Learning and Reasoning in the Era of Large Language Models workshop at AAAI Reviewer	
• [W.6] 17th International workshop on Neural-Symbolic Learning and Reasoning (NeSy) Programme Committee	2023 [①]
• [W.5] Neurosymbolic Generative Models (NeSy-GeMs) workshop at ICLR	2023
Programme Committee	[🗘]
• [W.4] 5th Financial Narrative Processing (FNP) workshop Programme Committee	2023 [()]
• [W.3] FinCausal shared task at The 4nd Financial Narrative Processing (FNP) workshop	2022
Organizer • [W.2] FinCausal shared task at The 3nd Financial Narrative Processing (FNP) workshop	[①] 2021
Organizer	[()]
• [W.1] FinCausal shared task at The 2nd Financial Narrative Processing (FNP) workshop	2020
Organizer	[(

• [M.11] Data Management

Data ScienceTech Institute School of Engineering



- · Language: English
- Number of hours: 5
- Description: Fundamentals of information systems analysis & design, functional dependency, relation model & relational algebra

[M.10] Operating Systems and Networking

2024-2025

[

Data ScienceTech Institute School of Engineering

Language: English

- Number of hours: 5
- Description: Fundamentals of algorithmics and data structure design, network layers, routing & protocols, address spaces and associated service with the TCP/IP suite

• [B.1] Relational Model and SQL

2023-2025

Data ScienceTech Institute School of Engineering

- Language: French
- Number of hours: 25
- Description: Introduction to the relational model, relational algebra operations, normal forms, database system design & SQL queries

• [M.9] Deep Learning

2023-2025

[💮]

Data ScienceTech Institute School of Engineering

- Language: English
- Number of hours: 25
- Description: PyTorch introduction, GPU training, neural network applications (computer vision, natural language processing, reinforcement learning)

[M.8] Artificial Neural Networks

2023-2025

Data ScienceTech Institute School of Engineering

- · Language: English
- Number of hours: 25
- o Description: Shallow & deep artificial neural networks, data representation & distributed representations, backpropagation & gradient descent, training & optimization, Python applications (Tensorflow & Keras)

 [M.7] Amazon AWS 2023-2025

Data ScienceTech Institute School of Engineering



- Language: English
- Number of hours: 50
- Description: Introduction to cloud computing, cloud architecture, preparation for the "AWS Certified Solutions Architect – Associate" certification

• [M.6] Data Wrangling with SQL

2023-2025

Data ScienceTech Institute School of Engineering

- Language: English
- Number of hours: 25
- Description: Review of relational models & database management systems, advanced SQL queries, dynamic SQL, stored procedures & triggers

• [M.5] AI Awareness 2023-2025

Data ScienceTech Institute School of Engineering



- Language: English
- Number of hours: 5
- Description: Learning processes in living organisms and computers, AI ethics and challenges

• [M.4] Software Engineering - Part 2

2021-2025

Data ScienceTech Institute School of Engineering

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- · Language: English
- Number of hours: 25
- Description: Python object-oriented programming, overview of C++

• [M.3] Python Machine Learning Labs

2021-2025

Data ScienceTech Institute School of Engineering



Language: English

- Number of hours: 25
- o Description: Data structures, cleaning & preparation, Python libraries, feature engineering, machine learning algorithms, classification & regression

• [M.2] Introduction to Data Structures & Software Engineering

2021-2022

Data ScienceTech Institute School of Engineering

[

- Language: English
- Number of hours: 10
- Description: Introduction to data structures, benchmarks in Python & R, introduction to data simulation

2021-2025 • [M.1] Clean IT

Data ScienceTech Institute School of Engineering

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2021 **[**

2021 **[**

- Language: English
- Number of hours: 5

• [J.19] Poem

Salad Days • [J.18] Poem

Sledgehammer Lit

• Description: Introduction to Google Colab, Python local setup, virtual environments, IDE configuration, R & RStudio, Git & GitHub

LITERARY PUBLICATIONS	A=Anthology, B=Book, J=Journal
• [B.9] Game Theory	09/2024
Amazon Kindle Direct Publishing	
• [A.5] The Poetryhood	2024
The Poetryhood	[•]
• [J.33] What's in a Name?	2024
The Paris Institute For Critical Thinking	[•]
• [J.32] Winter 2023/24	2023
The Paradox Literary Magazine	[⊕]
• [J.31] Issue 7	2023
Indelible Lit	[\Pi]
• [J.30] Volume 1 Issue 3	2023
The Literatus	[•]
• [J.29] Issue 4	2023
Tap into Poetry	[•]
• [B.8] Titans	08/2023
Amazon Kindle Direct Publishing	
• [J.28] The Three Pillars of AI: Symbols, Neurons, and Graphs	2022
The AI Journal	[•]
• [J.27] The Three Pillars of AI: Symbols, Neurons, and Graphs	2022
The AI Journal	[•]
• [A.4] Winter	2022
Poets Choice	
• [A.3] Impressions of Love	2022
Pencil	
• [B.7] Memory	08/2022
Waterton Publishing Company	[0]
• [J.26] Featured Writer Cajun Mutt Press	2022 [�]
• [J.25] Spring 2022	2022
New Note Poetry	[\Pi]
• [J.24] Issue 4	2022
The Pine Cone Review	[•]
• [J.23] Poem	2022
Rusted Radishes	[•]
• [J.22] Issue VII	2022
The Closed Eye Open	[•]
• [J.21] Issue 1	2021
BEATIFIC	[•]
• [J.20] Poem	2021
Jasad	[🗘]
[I dol D	2024

• [B.6] Correspondence	08/2021 [\right]]
Waterton Publishing Company[B.5] Stems from the Edge of Silence	05/2020
Waterton Publishing Company	[]
• [J.17] Clogs Jellyfish Review	2020 [�]
• [J.16] Terminal One	2020
Unite the World • [J.15] Issue 13	[\Phi] 2020
Emerge Literary Journal	[🗘]
• [J.14] Poems	2020
Kreaxxxion Review	[🗘]
• [J.13] Poem Hamline Lit	2020 [�]
• [J.12] Poem	2020
Former People	
• [J.11] Issue 1.7 FEED Lit Magazine	2020 [�]
• [J.10] Poem	2020
Open Arts Forum	[]
• [J.9] Volume 4 Press Pause Press	2020 [�]
• [J.8] Poems	2020
Spillwords Press	[]
• [J.7] Issue 34	2020
Poet Speak Magazine	[🗘]
• [J.6] Poem Poetry Potion	2020 [�]
• [J.5] Poem	2020
Oddball Magazine	
• [J.4] Issue 137 Red Fez	2020 [�]
• [J.3] Volume 3 Issue 2	2019
Ink In Thirds	
• [B.4] It's a Big Big World	07/2019
Waterton Publishing Company • [A.2] And We Chose Everything	[\odots] 2018
Turning Point Books	[]
• [B.3] Vitality	12/2018
• [B.2] Diary In Poems	[\Pi] 04/2018
G&J Productions	[•]
• [B.1] A Road Away From Home	01/2017
G&J Productions	
• [A.1] One Hundred Voices: Volume One Allegiant Publishing Group	2016 [�]
• [J.2] Paying Dues	2016
Talking Soup	
• [J.1] Volume 2 Issue IX	2015
The Rain, Party, & Disaster Society	(
VOLUNTEER EXPERIENCE	07/2022 00/2022
 First Aid Training Protection Civile Paris Seine Passed the "PSC1 - Prévention et Secours Civiques de niveau 1" certification 	07/2023 - 08/2023
• Mentor	06/2022 - 02/2023
JobIRL L'orientation In Real Life ◦ Mentorship and job orientation for students looking to enter the data field	00,2022 02,2020
• Mentor	09/2021 - 02/2023
Social Builder	
Mentor in the Women in Digital (WID) program	
Mentor in the Adabot program	

Corporate Social Responsibility Member	03/2021 - 02/2023
Yseop	
• Member of the CSR team	
 Responsible for motivating local and global company initiatives 	
Liaison with associations and organizations	
 Ambassador Data ScienceTech Institute School of Engineering Student mentorship and job orientation 	01/2020 - 02/2023
• Editor Kiss My Poetry • Content selection and front-page editor	07/2020 - 12/2020
• Volunteer Greater Paris University Hospitals - AP-HP ○ Data Science volunteer for COVID-19 data analysis tasks	03/2020 - 07/2020
 Ambassador Beirut Poetics Ambassador of the Beirut Poetics Lebanon branch journal 	07/2018 - 12/2022
 Local poetry event organization and engagement of community members Promotion of cultural outreach of poetry 	
PROFESSIONAL MEMBERSHIPS	
 Global Network on Large-Scale Cross-domain and Multilingual Open Knowledge Graphs Neuro-symbolic AI Interest Group at the Alan Turing Institute Cognitive AI W3C Community Group Artificial Intelligence Knowledge Representation W3C Community Group Knowledge Graph Construction W3C Community Group Knowledge Graphs Interest Group at the Alan Turing Institute GDR RADIA Association for Computational Linguistics 	2025 - Present 2024 - Present 2024 - Present 2024 - Present 2024 - Present 2024 - Present 2024 - Present 2022 - Present
CERTIFICATIONS	
• IBM: Neuro-Symbolic AI Essentials	08/2022
Neo4j: Certified Professional	07/2022
Udacity: Machine Learning DevOps Engineer	05/2022
Hasso Plattner Institute: Knowledge Graphs	03/2022
Neo4j: Graph Data Science Certified	05/2022
• Massachusetts Institute of Technology: Minds and Machines	02/2021
Udacity: Deep Reinforcement Learning	01/2021
Leiden University: Miracles of Human Language: An Introduction to Linguistics	11/2020
• Ecole Polytechnique Federale de Lausanne: Computational Neuroscience	10/2020
Saint Petersburg State University: Neurolinguistics	10/2020
The University of Edinburgh: Philosophy and the Sciences	10/2020
HSE University: Towards language universals through lexical semantics	10/2020
CentraleSupélec: Analysez vos données textuelles	08/2019
Université Grenoble Alpes: Introduction à la linguistique de corpus	07/2019
AWS Academy: Academy Cloud Computing Architecture	12/2018
Udacity: Artificial Intelligence	07/2017
ADDITIONAL INFORMATION	

Languages: English (Native), French (Native), Arabic (Native)
Interests: Literature (Fiction, Philosophy, Classics, Computer Science), Musical Instruments (Electric Guitar), Sports (Football, Basketball, Running, Hiking, Tennis), French driving license

REFERENCES

1. Fabien Gandon

Senior Researcher in Informatics and Computer Science, Wimmics

INRIA

Email: fabien.gandon@inria.fr Relationship: PhD Supervisor

2. Sebastien Corniglion

Chief Executive Officer (CEO) and Dean

Data ScienceTech Institute School of Engineering

Email: sebastien.corniglion@dsti.institute

Relationship: Direct Manager

3. Dominique Mariko

VP AI and Data Science

Yseop

Email: dominique.mariko@dsti.institute

Relationship: Former Team Leader