RAHMA CHAABOUNI

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EDUCATION

ENS Ulm/ Facebook AI Research   *2018 - Present*
CIFRE PhD program
Advisors: Emmanuel Dupoux (ENS Ulm), Marco Baroni (Facebook)
Subject: Developing human-like languages with neural network agents

Ecole Polytechnique   *2015 - 2016*
M.S. in Data Science
Courses include: High dimensional Statistics, Big Data Analytic, Kernel methods.
Projects include: Sentiment Analysis on the IMDB reviews. Mark (20/20), Actor clustering: Participating in the data challenge competition (Reminiz problem). (3rd position).

CentraleSupelec   *2012 - 2016*
Diplôme d'ingénieur (MS equivalent) (GPA 3.9/4)
Courses include: statistical machine learning, optimization.
Projects include: Ensighten – Advanced Marketing Attribution Modeling: Build models to improve Marketing attribution capacities. Mark (18/20).

Workshops and Summer Schools
Emergent Communication: Towards Natural Language, co-located with the Neurips Conference, Vancouver   *December 2019*
BlackboxNLP, co-located with the ACL Conference, Florence   *August 2019*
LSA summer school, Davis   *July 2019*
Interaction and the Evolution of Linguistic Complexity, Edinburgh   *June 2019*
CommAI-env: An Environment for Communication-Based AI, co-located with the NIPS Conference, Barcelona   *December 2016*

EXPERIENCE

Facebook AI Research   *2017 (4 months)*
Research Intern Subject: Build an agent to interact with the CommAI environment
Advisor: Marco Baroni

ENS ULM   *2016 (4 months)*
Research Intern Subject: Learn a multimodal representation of the speech (speech, visual, articulatory)
Advisor: Emmanuel Dupoux

Milliman – Predictive Analytics   *2016 (5 months)*
Software Engineering Intern Subject: Subject: Dynamic Neuron network: Boosting neural networks and develop an internal library for data mining (Pyspark)

ABC arbitrage - Quantitative research   *2015 (6 months)*
Software Engineering Intern Subject: Machine learning and data mining involving the quantitative analysis of the financial environment to detect arbitrage situations

AWARDS

3-year Full Doctoral Funding, Facebook Paris	2018
Graduate Student Travel Grant, INETRSPEECH2017	2017
Excellence Scholarship: 3-year scholarship, Tunisian Ministry of Education	2012

COMPUTER SKILLS

Languages   Python (Pytorch library), R, Spark, Java, Matlab, Bash

PUBLICATION

Published work

[1] Mathieu Rita, **Rahma Chaabouni**, Emmanuel Dupoux, *Lazy and Impatient neural agents learn to communicate efficiently.* CoNLL 2020 (Oral). [pdf].

[2] **Rahma Chaabouni***, Eugeny Kharitonov*, Diane Bouchacourt, Emmanuel Dupoux, Marco Baroni. *Compositionality and generalization in emergent languages.* ACL 2020 (Oral). [pdf]

[3] Eugeny Kharitonov, **Rahma Chaabouni**, Diane Bouchacourt, Marco Baroni. *Information Minimization In Emergent Languages.* ICML 2020, [pdf]

[4] Eugeny Kharitonov, **Rahma Chaabouni**, Diane Bouchacourt, Marco Baroni. *Information Minimization In Emergent Languages.* BAICS workshop (ICLR 2020) (Spotlight), [pdf]

[5] **Rahma Chaabouni**, Eugeny Kharitonov, Emmanuel Dupoux, Marco Baroni. *Anti-efficient encoding in emergent communication .* NEURIPS 2019. [pdf]

[6] Eugeny Kharitonov, **Rahma Chaabouni**, Diane Bouchacourt, Marco Baroni. *EGG: a toolkit for research on Emergence of lanGuage in Games.* EMNLP 2019 (Demo). [pdf]

[7] **Rahma Chaabouni**, Eugeny Kharitonov, Alessandro Lazaric, Emmanuel Dupoux, Marco Baroni. *Word-order biases in deep-agent emergent communication.* ACL 2019 (Oral). [pdf]

[8] **Rahma Chaabouni**, Ewan Dunbar, Neil Zeghidour, Emmanuel Dupoux. *Learning weakly supervised multimodal phoneme embeddings.* INTERSPEECH 2017 (Oral). [pdf]

Work in preparation

[9] **Rahma Chaabouni**, Eugeny Kharitonov, Emmanuel Dupoux, Marco Baroni, *Communicating artificial neural networks develop efficient color-naming systems.*

[10] Eugeny Kharitonov*, **Rahma Chaabouni***, *What they do when in doubt: a study of inductive biases in seq2seq learners*, arxiv 2020. [pdf]

[11] **Rahma Chaabouni***, Roberto Dessi, Eugeny Kharitonov*, *Can Transformers jump around right in natural language? Assessing performance transfer from SCAN.*

ACTIVITIES

Co-organizer: Bi-weekly writing club, LSCP ENS Paris	*2020*
Co-organizer: EmeCom Workshop, co-located with Neurips2020 [website]	*2020*
Co-organizer: Weekly reading group, CoML ENS Paris	*2020*
Organizer: Weekly team meeting, CoML ENS Paris	*2019*
Organizer: Monthly FAIR/DEC meeting	*2019*
Moderator: "Language learning in grounded environments" for the Olivier Legrain Conference "Artificial intelligence and Cognition"	*2018*

Co-organizer of the Olivier Legrain Conference "Artificial intelligence and Cognition" [website]   *2018*

Conference reviewer: LREC 2019, EMNLP 2020, CoNLL 2020, EACL 2020

STUDENT SUPERVISION

Mathieu Rita, Master student in Engineering, Ecole Polytechnique, France   *2020 (4 months)*
Charlotte Caucheteux, Master student in Engineering, Ecole Polytechnique, France   *2019 (4 months)*
Diego Andai Catilla Master student in Computer Science, Pontificia Universidad Católica de Chile, Chile   *2018 (4 months)*