Nouha DZIRI

PERSONAL DATA

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RESEARCH INTERESTS

Conversational AI, Dialogue Evaluation, Trustworthy NLP, Natural Language Generation, Natural Language Understanding.

EDUCATION

Fall. 2022 (Expected) SEP. 2018	**Ph.D. Computing Science**, University of Alberta, Edmonton, Canada Tentative Thesis title: "Towards Building Faithful Dialogue Systems" Supervisor: Prof. Osmar Zaiane GPA: 4.0/4.0
JUN. 2018 SEP. 2016	**M.Sc. Computing Science**, University of Alberta, Edmonton, Canada Thesis title: "Response Generation for an Open-ended Conversational Agent" Supervisor: Prof. Osmar Zaiane GPA: 4.0/4.0

RESEARCH & WORK EXPERIENCE

JAN. 2022 MAY. 2022	Student Researcher **Google Research NYC** Advisors: **Tal Linzen, David Reitter, Hannah Rashkin** Activities: Work on evaluating groundedness/attribution of machine-generated responses.
MAY. 2021 APRIL. 2022	Visiting Researcher **Mila/McGill** Advisor: **Siva Reddy** Activities: Perform a large-scale audit of hallucinations in dialogue benchmarks and introduce a high-quality faithful dialogue benchmark.
JUN. 2020 SEP. 2020	Research Intern **Google Research NYC** Advisors: **Tal Linzen**, **Hannah Rashkin**, **David Reitter** Activities: Introduce the BEGIN benchmark which evaluates groundedness in dialogue systems.
OCT. 2019 MAY. 2019	Research Intern **Microsoft Research MTL** Advisors: **Alessandro Sordoni**, **Hannes Schulz**, **Goeff Gordon**, **Shikhar Sharma** Activities: Introduce DEMI which transforms a hard mutual information estimation problem into smaller subproblems which can potentially capture more of the total information.
MAY. 2019 AUG. 2019	Research Intern **Google Research NYC** Advisors: **Diyi Yang**, **Tom Kwiatkowski**, **Eva Schlinger** Activities: Perform an analysis on how properties of different requests interact with audience characteristics to affect the outcome of persuasion.

Publications

[1] **Nouha Dziri**, Ehsan Kamalloo, Sivan Milton, Osmar Zaiane, Mo Yu, Edoardo Maria Ponti, Siva Reddy. **FaithDial: A Faithful Benchmark for Information-Seeking Dialogue.** TACL 2022.

[2] **Nouha Dziri**, Sivan Milton, Mo Yu, Siva Reddy. **On the Origin of Hallucination in Conversational Models: Is it the Datasets or the Models?** NAACL 2022.

[3] **Nouha Dziri**, Hannah Rashkin, Tal Linzen, and David Reitter. **Evaluating Groundedness in Dialogue Systems: The BEGIN Benchmark**. TACL 2022.

[4] **Nouha Dziri**, Andrea Madotto, Osmar Zaiane, and Avishek Joey Bose. **Neural Path Hunter: Reducing Hallucination in Dialogue Systems via Path Grounding**. EMNLP 2021.

[5] Alessandro Sordoni*, **Nouha Dziri***, Hannes Schulz*, Goeff Gordon and Remi Tachet. **Decomposed Mutual Information Estimation for Contrastive Representation Learning**. ICML 2021.
(* equal contribution)

[6] **Nouha Dziri**, Ehsan Kamalloo, Kory Mathewson, and Osmar Zaiane. **Evaluating Coherence in Dialogue Systems using Entailment**. NAACL 2019.

[7] **Nouha Dziri**, Ehsan Kamalloo, Kory Mathewson, and Osmar Zaiane. **Augmenting Neural Response Generation with Context-Aware Topical Attention**. ACL 2019 workshop NLP4ConvAI.

[8] Chenyang Huang, Osmar Zaiane, Amine Trabelsi and **Nouha Dziri**. **Automatic Dialogue Generation with Expressed Emotions**. NAACL 2018.

[9] **Nouha Dziri** and Osmar Zaiane. **Response Generation for An Open-Ended Conversational Agent**. NeurIPS WiML 2018.

Invited Talks

June. 2022	**Stanford NLP seminar**. "Towards Building Faithful Dialogue Systems"
May. 2022	**Google Research**. "FaithDial: A Faithful Benchmark for Information-Seeking Dialogue."
May. 2022	**Amazon Research**. "FaithDial: A Faithful Benchmark for Information-Seeking Dialogue."
Sep. 2021	**Mila, McGill University**. "Neural Path Hunter: Reducing Hallucination in Dialogue Systems via Path Grounding."
Mar. 2021	**Google Developer Student Club, University of Toronto**. "Inspiring Females to Pursue a Career in STEM: She Believed She Could ... So She Did."
Aug. 2020	**Google Research**. "Evaluating Groundedness in Dialogue Systems."
Sep. 2020	**IVADO: NLP Consortium for Dialogue systems**. "Evaluating Coherence in Dialogue Systems using Entailment."
Dec. 2019	**DeepMind**. "Evaluation in Open-Domain Dialogue Systems."
Nov. 2019	**Microsoft Research**. "Generating Dialogues by Mutual Information Maximization."
Sep. 2019	**Rasa Developer Summit** "Evaluating Coherence in Dialogue Systems using Entailment."
Aug. 2019	**Google Research**. "Is this Request Persuasive For You? Personalization in Persuasion."
Sep. 2018	**University of Alberta**. "Response Generation for An Open-Ended Conversational Agent."

Teaching

Mar. 2019	CMPUT 699, Natural Language Processing; **Guest Lecture** on dialogue systems at University of Alberta.
Sep. 2018	CMPUT 174, Introduction to Data Structure. **Teaching Assistant** at University of Alberta.

Scholarships and Awards

Oct. 2021	EMNLP 2021 **full travel grant** ($\sim$ $3000).
Jul. 2021	**Outstanding Reviewer** at ACL 2021 **(top 1%)**
Mar. 2019	Invited to the **Amazon's Graduate Research Symposium** among top student researchers across north America, Seattle. ($\sim$ $2500).
Nov. 2018	NeurIPS WiML 2018 **travel grant** ($\sim$ $2000)
Sep. 2018	Alberta Doctoral Recruitment **Scholarship** ($10,000)
Sep. 2018	Tunisian Ministry of Higher Education **PhD Scholarship (top 1%)** ($70,000)
Nov. 2017	**Best Poster Award**, ACM Canadian Celebration of Women in Computing ($400)
Apr. 2017	**Mitacs** Globalink Graduate **Fellowship** ($15,000)
Apr. 2016	Tunisian Ministry of Higher Education **MSc Scholarship (top 1%)** ($44,000)
Jan. 2016	**DAAD** Scholarship for Research Internship, Leipzig, Germany (€10.000)
Dec. 2015	**Mitacs Globalink** Research Scholarship, Canada ($11.000)
Apr. 2015	**Erasmus Mundus** Exchange BSc Student Scholarship **(Declined)** (€30.000)

Mentorship

Jun. 2021/Apr. 2022	Sivan Milton, BSc student at Department of Linguistics, McGill University.

Academic Service

- **Reviewer**: ACL (2019-2022), EMNLP (2020, 2021), NAACL (2020, 2021), EACL (2020), AAAI (2020), IEEE Transactions on Audio, Speech and Language Processing (Journal) (2021).

Technical Skills

- **Programming Languages**: Python, Java, C++

- **Deep learning libraries**: Pytorch, TensorFlow

References

- **Osmar Zaiane**: Full professor at University of Alberta and Canada CIFAR AI Chair. (zaiane@ualberta.ca)

- **Siva Reddy**: Assistant Professor at Mila/McGill University and Facebook CIFAR AI Chair. (siva.reddy@mila.quebec)

- **David Reitter**: Senior Research Scientist at Google Research NYC. (reitter@google.com)

- **Alessandro Sordoni**: Principal Researcher at Microsoft Research Montreal. (alsordon@microsoft.com)

Linguistic Skills

- **Fluent**: English, French, Arabic

- **Beginner**: German, Italian

Extra

When I'm not doing NLP, I love playing tennis.