Nour K. Jedidi

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EDUCATION

Carnegie Mellon University   **Pittsburgh, PA**
M.S. in Language Technologies, **School of Computer Science**   **August 2020 – August 2022**
- Relevant Coursework: Algorithms for NLP (PhD), Probabilistic Graphical Models (PhD), Neural Networks for NLP (PhD) Machine Learning for Text Mining, Bayesian Statistics (PhD), Causality and Machine Learning (PhD)

B.S. in Statistics and Machine Learning   **August 2016 – May 2020**
- Relevant Coursework*:* Algorithms & Advanced Data Structures, Data Mining, Machine Learning, Deep Learning (PhD), Deep Reinforcement Learning, Time Series Analysis, Multivariate Statistics (PhD)

PROFESSIONAL EXPERIENCE

Carnegie Mellon University, Language Technologies Institute   **Pittsburgh, PA**
Graduate Research Assistant – Professor Jamie Callan   **August 2020 – Present**
- Researched and implemented algorithms for improving state-of-art neural NLP models (i.e., BERT, T5) for information retrieval and conversational search on the following projects:

Boeing Question Answering Project
- Designed methods to improve document representations for Boeing's search engine and question answering system.
- Trained a T5 model on Boeing's airplane maintenance manuals to improve language understanding over a different domain.
- Achieved 20% improvements in Recall@20 over the first-stage retrieval (BM25) baseline.

Influence of Question-Answering Datasets on Query Generation
- Investigated the impact of different question-answering datasets (i.e., SQuaD) on query generation with language models.

Neural Conversational Search
- Developed a pipeline that rewrites conversational queries into resolved search queries that achieves an NDCG@3 comparable to top systems in TREC CAST 2019 and 2020 automatic runs.

Carnegie Mellon University   **Pittsburgh, PA**
Graduate Teaching Assistant   **August 2020 – Present**
- Served as a Teaching Assistant for Data Mining, Marketing Research, Pricing Strategy, and Digital Marketing.

Remesh   **New York, NY**
Research Intern   **May 2019 – August 2019**
- Implemented natural language processing and machine learning algorithms for the Remesh product platform to enable marketers to learn about their customers in real-time.
- Developed an SVM classifier to predict whether moderators are asking poll-like or open-ended questions with 95% precision.
- Constructed various semantic similarity algorithms using neural networks and unsupervised methods to group responses to open-ended questions.

Bowery Capital   **New York, NY**
Summer Analyst   **May 2018 – August 2018**
- Analyzed the competitive landscape for various portfolio companies and potential investments.
- Led the process of drafting and presenting an investment memo for a potential portfolio company.
- Built a database for portfolio company SupplyShift consisting of over 160 corporations' environmental commitments relating to climate change, water, deforestation, energy, and waste.

RESEARCH PROJECTS

Causal Inference Using Text – A Comparison of Methods   **July 2021 – Present**
Advisors: Professors Dokyun Lee (Boston University) and Raghuram Iyengar (The Wharton School)
- This project studies how different NLP methods (i.e., LDA, BERT) impact causal insights gathered from text data.

Consumption Ideology   **May 2019 – January 2021**
Advisors: Professors Bernd Schmitt (Columbia Business School) and Josko Brakus (University of Leeds)
- Leveraged text mining techniques to assess ideology-related research in the academic marketing literature.
- Applied LDA topic modeling on the text data to identify the themes of ideology research in marketing.

SKILLS

Programming: C, Python, R, SAS (Base, Macros, Graph, Stat), PostgreSQL
Software/Frameworks: PyTorch, TensorFlow, Keras, BeautifulSoup, ggplot
Extra Curricular: CMU Club Basketball Team, Pittsburgh Donut Dash