

Nabiha Asghar

✉ ch.nabiha@gmail.com
Location: Seattle, WA, USA

<http://nabihach.github.io>
www.linkedin.com/in/nabihaasghar

HIGHLIGHTS

- ◇ **Skills:** Natural Language Processing, Machine Learning, Deep Learning, Algorithms, Probabilistic Models, Python, AWS, Linux, Git, Technical Writing
- ◇ **Experience:** Applied Scientist (NLP) at *Microsoft*, NLP Engineer at *Textio*; Data Scientist at *ProNavigator*.
- ◇ **Publications:** NeuCAIR @ ICLR'21, ICLR'20, AMTL @ ICML'19, ECIR'18, *SEM'17, UAI'15.

EDUCATION

- ◇ **University of Waterloo**, Waterloo, ON, Canada.
Ph.D. in Computer Science (Sept 2014 - June 2020)
Research Area: Deep Learning for Natural Language Generation
- ◇ **University of Waterloo**, Waterloo, ON, Canada.
M.Math. in Combinatorics & Optimization (Sept 2011 - June 2013)
Research Area: Graph Theory
- ◇ **Lahore University of Management Sciences**, Lahore, Pakistan.
B.Sc. Honors. in Mathematics (2006-2010). CGPA: 3.91/4.00.

SKILLS

- ◇ Natural Language Processing, Machine Learning, Deep Learning, Probabilistic Modeling, Algorithm Analysis, Technical Writing
- ◇ Python (PyTorch), Java, Linux, Git, AWS, Azure ML

SELECTED RESEARCH

- ◇ **N. Asghar**, I. Kobyzev, J. Hoey, P. Poupart, M.B. Sheikh. *Emotion Alignment in Neural Dialogue Generation*. arXiv:2003.03645. NeuCAIR Workshop at ICLR 2021.
- ◇ **N. Asghar**, L. Mou, K. A. Selby, K. D. Pantasdo, P. Poupart, X. Jiang. *Progressive Memory Banks for Incremental Domain Adaptation*. International Conference on Learning Representations (ICLR), 2020.
- ◇ **N. Asghar**, P. Poupart, J. Hoey, X. Jiang, L. Mou. *Affective Neural Response Generation*. 40th European Conference on Information Retrieval (ECIR), 2018.
- ◇ **N. Asghar**, P. Poupart, X. Jiang, H. Li. *Deep Active Learning for Dialogue Generation*. 6th Joint Conference on Lexical and Computational Semantics (*SEM), 2017.
- ◇ **N. Asghar**. *Automatic Extraction of Causal Relations from Natural Language Texts: A Comprehensive Survey*. arXiv:1605.07895, May 2016.
- ◇ **N. Asghar**, J. Hoey. *Intelligent Affect: Rational Decision Making for Socially Aligned Agents*. 31st Conference on Uncertainty in Artificial Intelligence (UAI), 2015.
- ◇ **N. Asghar**, J. Hoey. *Monte-Carlo Planning for Socially Aligned Agents using Bayesian Affect Control Theory*. University of Waterloo, Technical Report # CS-2014-21, 2014.

RELEVANT EXPERIENCE

- ◇ **Applied Scientist II**, *Microsoft* (May 2020 – Present).
Building state-of-the-art text prediction models for search and Office.
- ◇ **Software Engineer - NLP**, *Textio, Inc* (Aug 2019 – Apr 2020).
Built predictive solutions for Textio's augmented writing platform using machine learning and mathematical modeling.

- ◇ **Data Scientist - NLP**, *ProNavigator, Canada*, (Mar 2017 – Aug 2018).
Developed conversational AI for customer support (insurance domain).
- ◇ **Research Associate - AI**, *University of Waterloo* (Jan – June 2014)
Researched and developed emotion modeling techniques in human-computer interaction via continuous POMDPs.

HONORS &
AWARDS

- ◇ **Ontario Graduate Scholarship**, 2015 – 2016, 2017 – 2019.
- ◇ **Affiliate - Vector Institute for AI**, 2018 – 2019.
- ◇ **President's Graduate Scholarship**, Univ. Waterloo, 2015 – 2016, 2017 – 2019.
- ◇ **Huawei Distinguished Research Collaboration Award**, 2015 – 2016.
- ◇ **David R. Cheriton Graduate Scholarship**, Univ. Waterloo, 2016 – 2018.
- ◇ **Gold Medal (Mathematics)**, BSc. Hons., Lahore Univ. Management Sciences, 2010.