SHADEN SHAAR

Jan 27, 2022
Cornell University
Ithaca, United States

Phone: +1 (646) 286–3453
Email: sshaar31@gmail.com

Education

Cornell University, Ithaca, United States — 2021–Now
PhD, Computer Science, *GPA 3.93/4.00*

Carnegie Mellon University, Doha, Qatar — 2015–2019
Bachelor of Science, Computer Science, *GPA 3.53/4.00*
Minor: Mathematics
University Honors

Research Experience

NLP PhD Student at Cornell University — Aug 2021–Now
Natural Language Processing
Worked with: Dr. Claire Cardie
Research Topics: Long-Doc Summarizing

- Worked on narrative long-doc summarization (e.g., novels, movies)
- Developed new movie long doc summarization dataset
- Working on video summarization

Research Assistant at Qatar Computing Research Inst., HBKU — Jul 2019–May 2021
Natural Language Processing
Worked with: Dr. Preslav Nakov, Prof. Giovanni Da San Martino
Research Topics: Automated Fact-Checking; Propaganda Detection

- Worked on automated fact–checking by using previously fact–checked claims
- Developed Fact–checking schema to fight misinformation on COVID-19
- Co-organized multiple tasks in CLEF2020–CheckThat! and CLEF2021–CheckThat! Lab focused on fact-checking
- Built demos for propaganda detection in media
- Co-organized propaganda detection in text/images shared task in SemEval-2021

Independent Study at Carnegie Mellon Uni. — Aug 2018–Jan 2019
Natural Language Processing
Advisors: Prof. Bhiksha Raj & Prof. Khaled Harras
Thesis Topic: Text–to–Speech Synthesis for Arabic Dialects

- Explored text–to–speech for multi-speaker setup and adapted it to Arabic dialects
- Built a text–to–speech model for multiple dialects of the Arabic Language

Research Intern at The Robotics Inst. at Carnegie Mellon Uni. — May 2018–Aug 2018
Computer Vision
Advisor: Dr. Christoph Mertz
Research Topic: Lane Detection for Autonomous Vehicles

- Worked on road image segmentation for lane detection and identification
- Explored deep learning and computer vision tools to identify & segment road markings

Research Associate at Carnegie Mellon Uni. — May 2017–June 2018
Machine Learning
Advisor: Prof. Bhiksha Raj
Research Topic: Active Testing

- Developed two algorithms that compete with state–of–the–art techniques to estimate the accuracy of a classifier under limited resources
- Proved mathematically & showed empirically the efficiency of the proposed algorithms

Publications

1. Dimitrov, D., Ali, Bishr., **Shaar, S.**, Alam, F., Silvestri, F., Firooz, H., Nakov, P., Martino, G.D. (2021). Detecting Propaganda Techniques in Memes. *Association for Computational Linguistics* **(ACL–IJCNLP'2021)**

2. Nakov, P., Martino, G.D., Elsayed T., Barrón-Cedeno, A., Míguez, R., **Shaar, S.**, Alam, F., Haouari, F., Hasanain, M., Babulkov, N., Nikolov, A., Shahi, G., Struß, J., Mandl, T.. (2021). The CLEF-2021 CheckThat! Lab on Detecting Check-Worthy Claims, Previously Fact-Checked Claims, and Fake News. *European Conference On Information Retrieval.* **(ECIR'2021)**

3. Alam, F., **Shaar, S.**, Dalvi, F., Sajjad, H., Nikolov, A., Mubarak, H., Martino, G.D., Abdelali, A., Durrani, N., Darwish, K., Al-Homaid, A., Zaghouani, W., Caselli, T., Danoe, G., Stolk, F., Bruntink, F., Nakov, P. (2021). Fighting the COVID-19 Infodemic: Modeling the Perspective of Journalists, Fact-Checkers, Social Media Platforms, Policy Makers, and the Society. *Findings of Empirical Methods in Natural Language Processing.* **(Findings of EMNLP'2021)**

4. Alam, F., Dalvi, F., **Shaar, S.**, Durrani, N., Mubarak, H., Nikolov, A., Martino, G.D., Abdelali, A., Sajjad, H., Darwish, K., Nakov, P. (2021). Fighting the COVID-19 Infodemic in Social Media: A Holistic Perspective and a Call to Arms. *International Conference On Web And Social Media.* **(ICWSM'2021)**

5. Nakov, P., Corney, D., Hasanain, M., Alam, F., Elsayed, T, Barrón-Cedeno, A., Papotti, P., **Shaar, S.**, Martino, G.D. (2021). Automated Fact-Checking for Assisting Human Fact-Checkers. *International Joint Conferences on Artificial Intelligence.* **(IJCAI'2021)**

6. **Shaar, S.**, Martino, G.D., Babulkov, N., and Nakov, P. (2020). That is a Known Lie: Detecting Previously Fact-Checked Claims. *Association for Computational Linguistics.* **(ACL'2020)**

7. Martino, G.D., **Shaar, S.**, Zhang, Y., Yu, S., Barrón-Cedeño, A., and Nakov, P. (2020). Prta: A System to Support the Analysis of Propaganda Techniques in the News. *Association for Computational Linguistics.* **(ACL'2020)**,
Best Demo Award (Honorable Mention)

8. **Shaar, S.**, Razak, S., Dalvi, F., and Moosavi, S. (2018). Group Identification in Crowded Environments Using Proximity Sensing. *IEEE Conference on Local Computer Networks.* **(LCN'2018)**

9. Hassan, S.,**Shaar, S.**, Raj, B., and Razak, S. (2018). Interactive Evaluation of Classifiers Under Limited Resources, *IEEE International Conference on Machine Learning and Applications.* **(ICMLA'2018)**

Awards & Honors

- Awarded **University Fellowship** in 2021 for exceptional preparation and promise at Cornell University
- Paper awarded **Honorable Mention** at **ACL 2020**
- Graduated with **University Honors** in 2019 for outstanding grade point average at Carnegie Mellon Uni.
- Awarded the **Dean's List** for F15, S16, F16 and F17 at Carnegie Mellon Uni.
- Awarded a **50% Academic Merit Scholarship** in 2015 that is given to few promising students starting at Carnegie Mellon Uni.

Teaching Experience

Teaching Assistant at Carnegie Mellon Uni.

- 11-785 Introduction to Deep Learning, Prof. Bhiksha Raj (F18 & S19)
- 15-251 Great Theoretical Ideas, Prof. Christos Kapoutsis (S18 & S19)
- 15-213 Introduction to Computer Systems, Prof. Khaled Harras (F17)
- 15-112 Fundamentals of Programming, Prof. Saquib Razak (F16 & F17)
- 21-127 Concepts of Mathematics, Prof. Zelealem Yilma (S16)

Technical Skills

- Programming Languages: Python, C, SML, Assembly
- Deep Learning Toolkits: PyTorch, Tensorflow, Keras
- Machine Learning Toolkits: sklearn