Elias Stengel-Eskin

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Education

Johns Hopkins University — Baltimore, USA
Ph.D. in Computer Science, Advisor: Benjamin Van Durme — 2018–Current

- supported by NSF Graduate Research Fellowship

Johns Hopkins University — Baltimore, USA
MSE in Computer Science, Advisor: Benjamin Van Durme — 2018–2021

McGill University — Montreal, Quebec
Bachelor of Arts and Sciences in Cognitive Science — 2014–2018

- Minor: Linguistics
- First Class Honours (GPA: 3.85/4.00)
- Honours thesis: "Variational Bayesian Inference for Unsupervised Lexicon Discovery", Advisor: Timothy O'Donnell

Experience

Microsoft Research - Semantic Machines — Remote
PhD Research Intern — Summer 2021

Publications (peer-reviewed)

[1] E. **Stengel-Eskin***, A. Hundt*, Z. He, A. Murali, N. Gopalan, M. Gombolay, and G. D. Hager, "Guiding multi-step rearrangement tasks with natural language instructions", in *Conference on Robot Learning*, 2021.

[2] Z. Li, **E. Stengel-Eskin**, Y. Zhang, C. Xie, Q. Tran, B. Van Durme, and A. Yuille, "Calibrating concepts and operations: Towards symbolic reasoning on real images", in *Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV)*, Oct. 2021.

[3] **E. Stengel-Eskin**, J. Guallar-Blasco, and B. Van Durme, "Human-model divergence in the handling of vagueness", in *Proceedings of the 1st Workshop on Understanding Implicit and Underspecified Language*, Online: Association for Computational Linguistics, Aug. 2021, pp. 43–57.

[4] **E. Stengel-Eskin**, K. Murray, S. Zhang, A. S. White, and B. Van Durme, "Joint universal syntactic and semantic parsing", *Transactions of the Association for Computational Linguistics*, 2021.

[5] **E. Stengel-Eskin**, J. Guallar-Blasco, and B. Van Durme, "Exploring human-model divergence through vagueness", *Proceedings of the Society for Computation in Linguistics*, Feb. 2021, ***Abstract**.

[6] R. Culkin, J. E. Hu, **E. Stengel-Eskin**, G. Qin, and B. V. Durme, "Iterative Paraphrastic Augmentation with Discriminative Span Alignment", *Transactions of the Association for Computational Linguistics*, vol. 9, pp. 494–509, May 2021.

[7] **E. Stengel-Eskin**, A. S. White, S. Zhang, and B. Van Durme, "Universal decompositional semantic parsing", in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, 2020, pp. 8427–8439.

[8] A. S. White, **E. Stengel-Eskin**, S. Vashishtha, V. S. Govindarajan, D. A. Reisinger, T. Vieira, K. Sakaguchi, S. Zhang, F. Ferraro, R. Rudinger, *et al.*, "The universal decompositional semantics dataset and decomp toolkit", in *Proceedings of The 12th Language Resources and Evaluation Conference*, 2020, pp. 5698–5707.

[9] **E. Stengel-Eskin**, T.-R. Su, M. Post, and B. Van Durme, "A discriminative neural model for cross-lingual word alignment", in *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, 2019, pp. 909–919.

[10] M. McAuliffe, **E. Stengel-Eskin**, M. Socolof, and M. Sonderegger, "Polyglot and speech corpus tools: A system for representing, integrating, and querying speech corpora.", in *INTERSPEECH*, 2017, pp. 3887–3891.

Publications (other)

1. Y. Chen, S. Ebner, T. Chen, P. Xia, **E. Stengel-Eskin**, T. Su, J. E. Hu, N. Holzenberger, R. Culkin, C. Harman, M. Thomas, T. Lippincott, A. S. White, K. Rawlins, B. Van Durme, "NIST TAC SM-KBP 2019 System Description: JHU/UR Framework", 2019
2. **E. Stengel-Eskin**, "Variational Bayesian Inference for Unsupervised Lexicon Discovery", 2017, **Undergraduate Honours Thesis**

Teaching

- **Teaching Assistant** at Johns Hopkins University — Fall 2019
  Artificial Intelligence (EN.601.464/664)

Mentoring

- Jimena Guallar-Blasco — Summer 2020-Present
  BS expected 2024
- Zhuohong He — Winter 2021-Spring 2021
  MSE, Spring 2021

Skills

- **Programming (expert):** Python
- **Programming (proficient):** Bash, Java, R
- **Libraries/Frameworks:** PyTorch, NLTK, numpy, MechanicalTurk, networkx, MXNet

Languages

- **Native:** English, German
- **Fluent:** French
- **Other:** Latin (reading/translation), Spanish (intermediate)

Fellowships and Awards

- NSF Graduate Research Fellowship — 2018–Current
- First Class Honours in Cognitive Science — 2018
- Dean's Honor List (top 10% of faculty) — 2014–2015, 2016–2018
- Arts Undergraduate Research Internship Award ($4000) — 2016

Service

- **Reviewer:** ACL 2021