Eugene Yang Curriculum Vitae

(202) 803-3120 Contact 4603 Barbara Dr. Information eugene.yang@jhu.edu Beltsville, MD, 20705 Cross-lingual Information Retrieval, High Recall Retrieval, Technology-Assisted Review, Research Active Learning, Machine Learning with Scare Resource Interests EDUCATION Georgetown University, Washington, DC 2016 - 2021Ph.D. in Computer Science Thesis Topic: Cost Reduction and Modeling of Technology-Assisted Review Advisor: Ophir Frieder, Ph.D, Jeremy Fineman, Ph.D, and David D. Lewis, Ph.D National Tsing Hua University (NTHU), Hsinchu, Taiwan 2011 - 2016B.S. in Quantitative Finance (GPA: 3.62), June 2016 Minors: Computer Science, Mathematics Working Research Associate at Sep 2021 -EXPERIENCE Human Language Technology Center of Excellence (HLTCOE) in Johns Hopkins University Supervisors: Dawn Lawrie and James Mayfield Developing and researching state-of-the-art cross-lingual information retrieval approaches Intern Data Scientist at Reveal-Brainspace Summer 2018, 2019, 2020 Supervisor: David D. Lewis, Ph.D. Developed testing environments for technology-assisted review Conducted evaluation on the machine learning models used in house. Developed methods for integrating human knowledge into machine learning models Chief Frontend Developer at Trading Valley Nov. 2014 - Aug. 2016 Led front-end development team on main product development Managed project development on secondary product lines Designed system architectures Teaching Teaching Assistant at Georgetown University 2018 - 2021EXPERIENCE COSC586 - Text Mining COSC488 - Information Retrieval COSC285 - Data Mining COSC280 - Intro to Database Teaching Assistant at National Tsing Hua University, Taiwan 2013 - 2014QF200100 - Introduction to Programming Language QF200300 - Data Structures CS343100 - Web Development and Application Cost Modeling for Technology-Assisted Review. INVITED TALKS Sep. 27, 2021 at IR Seminar in University of Glasgow, UK. Choose No More: Combining Keyword Search and Supervised Learning. June 17, 2020 at Computer Science Seminar in National Chiao Tung University, Taiwan "Risk" in Machine Learning. Dec. 31, 2019 at Quantitative Finance Depart. in National Tsing Hua University, Taiwan

From AI in Law to AI in Everything: Decision Support vs Decision Making Sept. 10, 2019 at National Chengchi University, Taiwan

SELECTED PUBLICATIONS

- D. D. Lewis, **E. Yang**, and O. Frieder. "Certifying One-Phase Technology-Assisted Reviews". In: 30th ACM International Conference on Information and Knowledge Management (CIKM). 2021. URL: https://arxiv.org/abs/2108.12746
- E. Yang, D. D. Lewis, and O. Frieder. "TAR on Social Media: A Framework for Online Content Moderation". In: *Proceedings of Design of Experimental Search & Information REtrieval Systems (DESIRES)*. 2021. URL: https://arxiv.org/abs/2108.12752
- **E. Yang**, D. D. Lewis, and O. Frieder. "On Minimizing Cost in Legal Document Review Workflows". In: *Proceedings of the ACM Symposium on Document Engineering (DocEng)*. 2021. URL: https://arxiv.org/abs/2106.09866
- **E. Yang**, D. D. Lewis, and O. Frieder. "Heuristic Stopping Rules For Technology-Assisted Review". In: *Proceedings of the ACM Symposium on Document Engineering (DocEng)*. 2021. URL: https://arxiv.org/abs/2106.09871
- **E. Yang**, S. MacAvaney, D. D. Lewis, and O. Frieder. "Goldilocks: Just-Right Tuning of BERT for Technology-Assisted Review". In: *arXiv* (2021). URL: https://arxiv.org/abs/2105.01044
- T. Xiang, S. MacAvaney, **E. Yang**, and N. Goharian. "ToxCCIn: Toxic Content Classification with Interpretability". In: 11th Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis (WASSA). 2021. URL: https://arxiv.org/abs/2103.01328
- S. Sotudeh, T. Xiang, H.-R. Yao, S. MacAvaney, **E. Yang**, N. Goharian, and O. Frieder. "GUIR at SemEval-2020 Task 12: Domain-Tuned Contextualized Models for Offensive Language Detection". In: *Proceedings of the International Workshop on Semantic Evaluation (SemEval)*. 2020
- J. Garman, S. MacAvaney, **E. Yang**, and O. Frieder. "SIDIR: Extending SIR with Detected and Isolated Populations for Pandemic Modeling". In: *medRxiv* (2020). eprint: https://www.medrxiv.org/content/early/2020/07/26/2020.07.20.20157834.full.pdf
- S. MacAvaney, H.-R. Yao, **E. Yang**, K. Russell, N. Goharian, and O. Frieder. "Hate speech detection: Challenges and solutions". In: *PloS one* 14.8 (2019), e0221152
- E. J. Tzeng, E. Yang, S. Chen, and J. Chen. "A Practical Obstacle Avoidance Method Using Q-Learning with Local Information". In: *IFToMM World Congress on Mechanism and Machine Science (IFToMM)*. Springer. 2019, pp. 2149–2158
- **E. Yang**, D. D. Lewis, and O. Frieder. "Text Retrieval Priors for Bayesian Logistic Regression". In: *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR)*. Paris, France: ACM, 2019
- E. Yang, D. D. Lewis, and O. Frieder. "A Regularization Approach to Combining Keywords and Training Data in Technology-Assisted Review". In: *Proceedings of the 17th Edition of the International Conference on Artificial Intelligence and Law (ICAIL)*. Montreal, Canada, 2019
- N. Cao, J. T. Fineman, K. Russell, and **E. Yang**. "I/O-Efficient Algorithms for Topological Sort and Related Problems". In: *Proceedings of the Thirtieth Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*. 2019
- **E. Yang**, D. D. Lewis, O. Frieder, D. Grossman, and R. Yurchak. "Retrieval and Richness when Querying by Document". In: *Proceedings of the First Biennial Conference on Design of Experimental Search & Information Retrieval Systems (DESIRES)*. 2018
- **E. Yang**, D. Grossman, O. Frieder, and R. Yurchak. "Effectiveness Results for Popular e-Discovery Algorithms". In: *Proceedings of the 16th edition of the International Conference on Artificial Intelligence and Law (ICAIL)*. 2017

Professional Conference Program Committee

SERVICE $2020~{\rm ACL},\,2020~{\rm EMNLP},\,2021~{\rm EACL},\,2022~{\rm ECIR}$

Conference Reviewer

2018 AAAI, 2018 ACL, 2019 ECIR, 2021 ECIR

Patents

Financial Information Social Media Management System (co-inventor)

Taiwan Patent #P1504011 / TW, issued August 31, 2015

Financial Investment Competition Platform (co-inventor)

Taiwan Patent #P1504008 / TW, issued September 30, 2015