

Anatole Gershman

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PROFESSIONAL INTERESTS

Social simulation with LLMs, Information fusion, Automated knowledge acquisition, Active learning, Data Science, Dialog Systems

EDUCATION:

Yale University	PhD Computer Science	5/79
Moscow State Pedagogical University	BS/MS Mathematics and Computer Science	6/71

POSITIONS HELD:

Carnegie Mellon University, Language Technologies Institute, 4/07-6/23, Distinguished Career

Professor – bringing 40+ years of industrial R&D experience to academic research and teaching

Accenture, 12/89-11/06, Global Director of Research (3/97-11/06), Chief Scientist (9/05-11/06), Director of Human Systems Integration Laboratory (12/89-3/97); Led all of the firm's applied technology research and technology assessment efforts worldwide, covering four main areas: intelligent devices, analytics, human computer interaction and systems integration

Coopers & Lybrand, 1/88-11/89, Director of National Decision Support Group; Led and supervised Expert and Knowledge-Based Systems development

Cognitive Systems, Inc., 5/82-12/88, Vice-president, Technology; Led and supervised numerous Artificial Intelligence software development projects including automatic message processing products and Conversational Advisory Systems in banking, brokerage, insurance and travel areas

Schlumberger, 1/80-4/82, Member of Professional Staff; Research and development in applications of AI techniques to geology and signal processing

Bell Laboratories, 4/79-12/80, Member of Technical Staff; Research in natural language processing and man-machine interfaces

PUBLICATIONS:

- [1] Elizabeth Spaulding, Kathryn Conger, Anatole Gershman, Rosario Uceda-Sosa, Susan Windisch-Brown, James Pustejovsky, Peter Anick and Martha Palmer, 2023. The DARPA Wikipedia overlay wikidata as an ontology for natural language processing. *Proceedings of the 19th Joint ACL - ISO Workshop on Interoperable Semantic Annotation (ISA-19)*, June 20, 2023, Nancy, France
- [2] Feng, S.Y., Khetan, V., Sacaleanu, B., Gershman, A. and Hovy, E., 2022. CHARD: Clinical Health-Aware Reasoning Across Dimensions for Text Generation Models. *arXiv preprint arXiv:2210.04191*.
- [3] Rajagopal, D., Khetan, V., Sacaleanu, B., Gershman, A., Fano, A. and Hovy, E., 2021. Cross-domain reasoning via template filling. *arXiv preprint arXiv:2111.00539*.
- [4] Rajagopal, D., Khetan, V., Sacaleanu, B., Gershman, A., Fano, A. and Hovy, E., 2021. Template Filling for Controllable Commonsense Reasoning. *arXiv preprint arXiv:2111.00539*.
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- [7] Marujo, L., Ribeiro, R., Gershman, A., de Matos, D.M., Neto, J.P., Carbonell, J. (2017). Event-based summarization using a centrality-as-relevance model. *Knowledge and Information Systems*, 50(3), 945.

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- [10] Marujo, Luís, et al. "Exploring events and distributed representations of text in multi-document summarization." *Knowledge-Based Systems* 94 (2016): 33-42.
- [11] Gupta, Dishan, et al. "Unsupervised Phrasal Near-Synonym Generation from Text Corpora." *AAAI*. 2015.
- [12] Luís Marujo, Ricardo Ribeiro, David Martins de Matos, João P. Neto, Anatole Gershman, Jaime Carbonell (2015). "Extending a Single-Document Summarizer to Multi-Document: a Hierarchical Approach". *Proceedings of *SEM2015: the 4th Joint Conference on Lexical and Computational Semantics*".
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- [15] Chen, Yun-Nung, et al. "Matrix Factorization with Knowledge Graph Propagation for Unsupervised Spoken Language Understanding." *ACL (1)*. 2015.
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PATENTS

13 US patents issued:

8,108,369; 7,904,501; 7,593,915; 7,401,734; 7,398,231; 7,194,428; 6,766,947; 6,705,522; 6,664,980; 6,539,281; 6,401,085; 6,356,905; 6,199,099