PROMOTION RECOMMENDATION The University of Michigan College of Engineering

Approved by the Regents May 21, 2015

Department of Electrical Engineering and Computer Science

Rada F. Mihalcea, associate professor of electrical engineering and computer science, with tenure, Department of Electrical Engineering and Computer Science, College of Engineering, is recommended for promotion to professor of electrical engineering and computer science, with tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

Academic Degrees:

Ph.D.	2010	Oxford University, Linguistics, Oxford, United Kingdom
Ph.D.	2001	Southern Methodist University, Computer Science and Engineering, Dallas, TX
		Southern Methodist University, Computer Science and Engineering, Dallas, TX
B.S.		Technical University of Cluj-Napoca, Computer Science and Engineering, Cluj-
		Napoca, Romania

Professional Record:

2013 – present	Associate Professor (with tenure), Department of Electrical Engineering and
	Computer Science, University of Michigan
2008 - 2013	Associate Professor (with tenure), Department of Computer Science and
	Engineering, University of North Texas, Denton, TX
2002 - 2008	Assistant Professor, Department of Computer Science and Engineering,
	University of North Texas, Denton, TX
2005	Visiting Scholar, Media Arts and Sciences, Massachusetts Institute of
	Technology, Cambridge, MA
2002	Visiting Assistant Professor, University of Texas at Dallas, Dallas, TX

Summary of Evaluation:

<u>Teaching</u>: Since her appointment, Professor Mihalcea has introduced a new undergraduate course, Information Retrieval and Web Search (EECS 498), and has received good teaching evaluation ratings. In addition, she has presented several tutorials at major conferences and summer schools. Professor Mihalcea has graduated 10 Ph.D. students including nine students during her time at UNT. She currently supervises another six Ph.D. students. Professor Mihalcea has also been active advising a number of M.S. students and directing undergraduate major projects. Other teaching activities include a presentation to the parents of 150 middle/high school girls attending the University of Michigan Girls in Research Engineering and Technology (GREAT) Day. In addition, she has taught a number of short courses and tutorials at various venues.

<u>Research</u>: Professor Mihalcea is an influential researcher in the field of Natural Language Processing and Information Retrieval. She has pioneered the use of Wikipedia for natural language processing tasks, including word sense disambiguation and keyword extraction, and her novel techniques for document summarization have become widely used. She also has made

groundbreaking contributions on how to use corpus and knowledge-based techniques for computing text similarity, and knowledge-based question answering. In 2009, she was the recipient of a prestigious Presidential Early Career Award for Scientists and Engineers (PECASE). She also received an NSF CAREER award in 2008. Professor Mihalcea has published more than 200 research papers, many in top journals and conferences in her field, and has accumulated more than 9,500 citations on Google Scholar. She has six active grants, which currently support six GSRAs and one post-doctoral researcher.

Recent and Significant Publications:

- Veronica Perez-Rosas and Rada Mihalcea, "Cross-Cultural Deception Detection," in *Proceedings of the Association for Computational Linguistics*, Baltimore, MD, June 2014.
- Veronica Perez-Rosas, Rada Mihalcea and Louis-Philippe Morency, "Utterance-Level Multimodal Sentiment Analysis," in *Proceedings of the Association for Computational Linguistics* (ACL 2013), Sofia, Bulgaria, August 2013.
- Carmen Banea, Rada Mihalcea and Janyce Wiebe, "Porting Multilingual Subjectivity Resources Across Languages," in *IEEE Transactions on Affective Computing*, vol. 4, no. 2, 2013.
- Hui Shen, Razvan Bunescu and Rada Mihalcea, "Sense and Reference Disambiguation in Wikipedia," in *Proceedings of the International Conference on Computational Linguistics*, Mumbai, India, December 2012.
- Rada Mihalcea and Vivi Nastase, "Word Epoch Disambiguation: Finding How Words Change Over Time," in *Proceedings of the Association for Computational Linguistics*, Jeju Island, July 2012.
- Samer Hassan and Rada Mihalcea, "Learning to Identify Educational Materials," in *ACM Transactions on Speech and Language Processing*, vol. 8, no. 2, pp. 1-18, November 2011.
- Samer Hassan and Rada Mihalcea, "Semantic Relatedness Using Salient Semantic Analysis," in *Proceedings of the American Association for Artificial Intelligence*, San Francisco, August, 2011.
- Carmen Banea, Rada Mihalcea and Janyce Wiebe, "Multilingual Subjectivity: Are More Languages Better?" in *Proceedings of the International Conference on Computational Linguistics*, pp. 28-36, Beijing, China, August 2010.

Service: Professor Mihalcea has established a strong record of service. She has served as an organizer for her department's Distinguished Lecture Series and as a member of the CSE graduate admissions committee for the Artificial Intelligence (AI) area, which receives over 200 applications each year. Externally, she has made significant contributions, namely as program co-chair of two of the major conferences in her research area (Association of Computational Linguistics in 2011 and Empirical Methods in Natural Language Processing in 2009). Additionally, she will be the general chair of the North American Chapter of the Association for Computational Linguistics in 2015. She has been active in other conferences as well, serving as area chair, serving on workshop organization committees and review panels. In addition, she serves on the editorial boards of a number of journals, and served as guest editor and as a reviewer for journals in her field.

External Reviewers:

Reviewer A: "Prof. Mihalcea has made a phenomenal impact to the natural language processing area, with Google citations of her papers reaching beyond 9000...For Rada, the sky is the limit...She is also an excellent role model for younger women in STEM."

Reviewer B: "She is perhaps the best computational linguist of her generation and is among the leadership of the international computational linguistics community...Rada has a stellar record of scholarly achievements and leadership...She is also an extraordinary citizen, taking on significant leadership roles."

Reviewer C: "Rada has high international visibility in her field. Among her contemporaries, she is recognized as a prolific researcher, and she is one of the 'go to' people for service and outreach."

Reviewer D: "I consider Rada to be a highly productive and creative researcher. She has worked on an extremely interesting range of problems...Her publication record is truly impressive."

Reviewer E: "...Rada has also been very successful in supporting her research with funds from various government agencies and companies. The PECASE award...is of course particularly notable."

<u>Summary of Recommendation</u>: Professor Mihalcea has established a highly successful record of teaching, scholarly research, and service at the University of Michigan. It is with the support of the College of Engineering Executive Committee that I recommend Rada F. Mihalcea for promotion to professor of electrical engineering and computer science, with tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

David C. Munson, Jr.

Robert J. Vlasic Dean of Engineering

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College of Engineering

May 2015