Mariya Hendriksen

Curriculum Vitae

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Education

Mar 2019 - University of Amsterdam, PhD in Artifical Intelligence,

present Advisor: Maarten de Rijke · Mentor: Andrew Yates

2017 - 2019 KU Leuven, MSc in Artificial Intelligence, With Honors

Thesis: Dialogue Breakdown Detecton in Chatbots Advisors: Marie-Francine Moens, Artuur Leeuwenberg

2014 – 2015 University of Nantes, Exchange Programme

Topics: Algorithms and Data Structures, Object-oriented Programming, Information Systems

2012 – 2016 Novosibirsk State University, BSc in Computational Linguistics, With Honors

Thesis: Automatic Detection of Manipulation Tactics in News Articles

Advisors: Maria Timofeeva, Anna Leman

Experience

Jul 2023 - Bloomberg AI, Research Intern

Oct 2023 Hosts: Shuo Zhang, Ridho Reinanda, Mohamed Yahya, Edgar Meij

Nov 2022 - Amazon Science, Applied Research Intern

Mar 2023 Hosts: Svitlana Vakulenko, Gabriella Kazai, Emine Yilmaz

Sep 2018 – KU Leuven, Language Intelligence & Information Retrieval Lab, Research

Feb 2019 Intern

Topic: Dialogue Breakdown Detecton in Chatbots

Host: Marie-Francine Moens

Jul 2018 - ETH Zurich, Biomedical Informatics Lab, Research Intern

Sep 2018 Topic: Parallel and distributed training of deep mixture of experts for metagenomic DNA

classification

Host: Gunnar Rätsch

Feb 2017 - Lionbridge Technologies, Inc., Computational Linguist

May 2019 Contributed towards an AI writing assistance system

Jul 2018 – **Diogen**, Tutor & Mentor

Sep 2018 Teaching probability and discrete mathematics to children of age 10-12 and guiding them

throughout the camp sessions

Selected publications and preprints

Full list: Google Scholar

Thong Nguyen*, Mariya Hendriksen*, Andrew Yates, and Maarten de Rijke. Multimodal Learned Sparse Retrieval with Probabilistic Query Expansion. In ECIR 2024: 46th European Conference on Information Retrieval. Springer, March 2024.

Thong Nguyen, **Mariya Hendriksen**, and Andrew Yates. Multimodal Learned Sparse Retrieval for Image Suggestion. TREC 2023.

Mariya Hendriksen, Jordan Massiah, Svitlana Vakulenko, and Emine Yilmaz. Predicting Image-Seeking Intent for Cross-Device Search. Under submission.

Mariya Hendriksen, Svitlana Vakulenko, Ernst Kuipers, and Maarten de Rijke. Scene-Centric vs. Object-Centric Image-Text Cross-Modal Retrieval: A Reproducibility Study. In ECIR 2023: 45^{th} European Conference on Information Retrieval. Springer, April 2023.

Karel Veldkamp, **Mariya Hendriksen**, Zoltán Szlávik, and Alexander Keijser. Towards Contrastive Learning in Music Video Domain.

Mariya Hendriksen, Viggo Overes, Luka Wong Chung. Unimodal vs. Multimodal Siamese Networks for Outfit Completion. July 2022.

Mariya Hendriksen, Maurits Bleeker, Svitlana Vakulenko, Nanne van Noord, Ernst Kuipers, and Maarten de Rijke. Extending CLIP for Category-to-image Retrieval in E-commerce. In ECIR 2022: 44^{th} European Conference on Information Retrieval. Springer, April 2022.

Mariya Hendriksen. Multimodal Retrieval in E-commerce: from Categories to Images, Text, and Back. In ECIR 2022: 44^{th} European Conference on Information Retrieval. Springer, April 2022.

Goei, Kenneth, **Mariya Hendriksen**, and Maarten de Rijke. Tackling Attribute Fine-grainedness in Cross-modal Fashion Search with Multi-level Features. In Proceedings of the 2021 SIGIR Workshop on eCommerce. July 2021.

Mariya Hendriksen, Ernst Kuiper, Pim Nauts, Sebastian Schelter, and Maarten de Rijke. Analyzing and Predicting Purchase Intent in E-commerce: Anonymous vs. Identified Customers. In Proceedings of the 2020 SIGIR Workshop on eCommerce. July 2020.

Mariya Hendriksen, Fatemeh Sarvi and Maarten de Rijke. High Accuracy Recall Task: AIRLab Entry. In Proceedings of the 2019 SIGIR Workshop on eCommerce. July 2019.

Mariya Hendriksen, Artuur Leeuwenberg, and Marie-Francine Moens. LSTM for Dialogue Breakdown Detection: Exploration of Different Model Types and Word Embeddings. In Proceedings of WOCHAT. April 2019.

Supervision

- 2023 **Maurice Schaasberg**, *MSc in Artificial Intelligence*, University of Amsterdam *Topic*: Multimodal Learned Sparse Retrieval
- 2022 **Karel Veldkamp**, *MSc in Data Science*, University of Amsterdam, *Topic*: Multimodal Representation Learning for Music Video Recommendations
- 2022 **Viggo Overes**, *BSc in Computer Science*, University of Amsterdam, *Topic*: Multimodal Siamese Networks for Outfit Completion
- 2022 **Luka Wong Chung**, *BSc in Artificial Intelligence*, University of Amsterdam *Topic*: Graph Neural Networks for Outfit Completion

- 2021 **Christina Stroe**, *MSc in Data Science*, University of Amsterdam, *Topic*: Large Language Models and Pattern-exploiting Training for Document Analysis
- 2021 **Efstathios Charitos**, *MSc in Artificial Intelligence*, University of Amsterdam, *Topic*: A New Reddit-Sourced Dataset for Emotion-Aware Artwork Recommendation
- 2021 **Kenneth Goei**, *MSc in Artificial Intelligence*, University of Amsterdam *Topic*: Tackling Attribute Granularity for Cross-Modal Fashion Retrieval
- 2020 **Anne Klaver**, *MSc in Data Science*, University of Amsterdam, *Topic*: Addressing the Problem of Class Imbalance for Direct Marketing Response Model
- 2020 **Derek Heek**, *MSc in Data Science*, University of Amsterdam, *Topic*: Predicting Email Opening Intent for Mailing Lists

Teaching

- 2023 **Information Retrieval 2**, *MSc Artificial Intelligence*, University of Amsterdam Lecture on Multimodal Machine Learning for Search
- 2020 2021 **Deep Learning**, *MSc Artificial Intelligence*, University of Amsterdam Teaching Assistant
- 2021 2022 **Deep Learning 1**, *MSc Artificial Intelligence*, University of Amsterdam Teaching Assistant

Community service

Organizer: TREC AToMiC Track

Organizer: Dutch-Belgian Information Retrieval Workshop (DIR 2021)

Reviewing: WSDM, ECIR, CIKM, SIGIR, NeurIPS

PC member: SIGIR eCommerce workshop

Volunteer: NeurIPS'20, ICML 2020, ICLR 2020, SIGIR 2019

Technical skills

Programming Languages: Python, Java, Matlab, SQL, Prolog, LATEX
Frameworks & Tools: PyTorch, TensorFlow, Numpy, Scipy, Sklearn, BigQuery

Selected awards

- 2022 SIGIR conference attendance grant.
- 2022 Women in Data Science Zurich full travel grant.
- 2018 ETH Zurich Student Summer Research Fellowship: scholarship and full travel grant.
- 2017 2018 Oxford Russia Fund Scholarship.
- 2016 2017 Full-tuition University Scholarship, Higher School of Economics.
- 2015 2016 Excellence Scholarship, Novosibirsk State University.
- 2012 2016 Full-tuition University Scholarship, Novosibirsk State University.

Additional education

- 2020 Max Planck Institute for Intelligent Systems, Machine Learning Summer School
- 2019 Ecole Polytechnique, Data Science Summer School

Extracurricular activities

- 2019 Inclusive AI, Mentor, Amsterdam, the Netherlands
- present Mentoring MSc in AI students who identify themselves as minority.
 - 2022 Outlook Digital Economy report, Amsterdam, the Netherlands Contributed to a report into the impact of digital technologies on the Dutch economy by the year 2030.
 - 2022 **International Day of Women and Girls in Science**, Amsterdam, the Netherlands Gave an interview for the "Women & Girls in Science" edition of a newsletter at Ahold Delhaize.
- 2017 2019 Artificial Intelligence Advisory Committee, KU Leuven, Board Member, Leuven, Belgium

Worked together with the professors and other students on evaluating the MSc programme curriculum

- 2016 2017 **ESN HSE Moscow**, *Buddy*, Moscow, Russia Helping international students to adapt to living and studying in Russia
- 2016 2017 Let's bike it, Organizer, Moscow, Russia Took part in an initiative aimed at encouraging people to use bicycle as a primary mean of transport

Languages

Native: Russian

Full professional proficiency: English

Limited working proficiency: Dutch, French, Ukrainian

Miscellaneous

Interests: Over a decade of yoga practice, extensive international living experience (8 countries), certified ANDI Open Water Sport Diver, Diploma in Choreography from the Gubkinsky School of Arts