# Kevin Roitero

Current Position: Ph.D. Candidate at University of Udine (end date: 1 November 2019).

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#### EXPERIENCE

• Spotify London, GBR

Research Intern Sept 2018 – Dec 2018

Tasks: Statistical modeling, machine and transfer learning techniques to model internal processes.

Manager: Mounia Lalmas-Roelleke (Director, Tech Research).

## **EDUCATION**

• Ph.D. Candidate

Udine, ITA.

Department of Mathematics, computer Science, and Physics.

Nov 2016 - Present

Focus: Information retrieval, crowd-sourcing, machine and transfer learning, data mining and analysis, and statistical modeling. Scholarship provided by University of Udine.

• School of Information Technology and Electrical Engineering, UQ.

Brisbane, AUS.

Short visiting period (as PhD Student) to visit Gianluca Demartini.

23 July 2018 - 30 July 2018

• ISAR Group, RMIT University.

Visiting period (as PhD Student). Grant by the ISAR Group.

Melbourne, AUS.

Mar 2018 – July 2018

• Information School, University of Sheffield.

Sheffield, GBR.

Apr 2017 – June 2017

Visiting period (as PhD Student). Grant by ERASMUS+ Traineeship.

• University of Udine & Alpen-Adria-Universität

Master Joint Degree in International Computer Science.

Udine, ITA & Klagenfurt, AUT Sept 2014 – July 2016

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Grade: cum laude (110 cum laude/110).

• Alpen-Adria-Universität

Klagenfurt, AUT

Visiting period (as Master Student). Grant by University of Udine and ERASMUS.

Sept 2014 - Feb 2016

• University of Udine

Udine, ITA

 $Bachelor\ Degree\ in\ Computer\ Science.$ 

Sept 2014 - Oct 2016

Grade: 102/110.

#### **PUBLICATIONS**

- Personal Website (includes accepted publications): https://kevinroitero.com/#publications
- Google Scholar: https://scholar.google.com/citations?hl=en&user=1xd52jMAAAAJ
- DBLP: https://dblp.uni-trier.de/pers/hd/r/Roitero:Kevin

Year: 2019

• Bias and Fairness in Effectiveness Evaluation by Means of Network Analysis and Mixture Models.

Michael Soprano, <u>Kevin Roitero</u>, and Stefano Mizzaro.

Proceedings of the 10th Italian Information Retrieval Workshop, Padua, Italy, September 16-18, 2019.

• Towards Stochastic Simulations of Relevance Profiles.

Kevin Roitero, Andrea Brunello, Julin Urbano and Stefano Mizzaro.

Proceedings of the 28th ACM International Conference on Information and Knowledge Management (CIKM2019). Beijing, China. November 3-7, 2019. Conference Rank: A

• On Transforming Relevance Scales.

Lei Han, Kevin Roitero, Eddy Maddalena, Stefano Mizzaro and Gianluca Demartini.

Proceedings of the 28th ACM International Conference on Information and Knowledge Management (CIKM2019). Beijing, China. November 3-7, 2019. Conference Rank: A

• HITS Hits Readersourcing: Validating Peer Review Alternatives Using Network Analysis.

Michael Soprano, <u>Kevin Roitero</u>, and Stefano Mizzaro.

Proceedings of the 4th Joint Workshop on Bibliometric-enhanced Information Retrieval and Natural Language Processing for Digital Libraries (BIRNDL 2019).

• Fewer Topics? A Million Topics? Both?! On Topics Subsets in Test Collections.

<u>Kevin Roitero</u>, J. Shane Culpepper, Mark Sanderson, Falk Scholer, and Stefano Mizzaro Information Retrieval Journal (IRJ).

page 1 of 3

# • On Topic Difficulty in IR Evaluation: The Effect of Corpora, Systems, and System Components.

Shane Culpepper, Oren Kurland, Stefano Mizzaro, Kevin Roitero and Fabio Zampieri.

Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval. Paris, France. July 21-25, 2019. Conference Rank: A\*

### • All Those Wasted Hours: On Task Abandonment in Crowdsourcing.

Lei Han, <u>Kevin Roitero</u>, Ujwal Gadiraju, Cristina Sarasua, Alessandro Checco, Eddy Maddalena and Gianluca Demartini.

ACM International Conference on Web Search and Data Mining, WSDM 2019, Melbourne, Australia. Conference Rank:  $A^*$ 

Year: 2018

# • How Many Truth Levels? Six? One Hundred? Even more? Validating Truthfulness of Statements via Crowdsourcing.

Kevin Roitero, Damiano Spina, Gianluca Demartini, and Stefano Mizzaro.

RDSM 2018: Workshop on Rumours and Deception in Social Media.

# • Reproduce. Generalize. Extend. On Information Retrieval Evaluation without Relevance Judgments.

<u>Kevin Roitero</u>, Marco Passon, Giuseppe Serra, and Stefano Mizzaro.

ACM Journal of Data and Information Quality (JDIQ).

# • Reproduce and Improve: An Evolutionary Approach to Select a Few Good Topics for Information Retrieval Evaluation.

Kevin Roitero, Michael Soprano, Andrea Brunello, and Stefano Mizzaro.

ACM Journal of Data and Information Quality (JDIQ).

#### • On Fine-Grained Relevance Scales.

Kevin Roitero, Eddy Maddalena, Gianluca Demartini and Stefano Mizzaro.

Proceedings of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A. July 8-12, 2018. Conference Rank: A\*

# • Query Performance Prediction and Effectiveness Evaluation Without Relevance Judgments: Two Sides of the Same Coin.

Stefano Mizzaro, Josiane Mothe, Kevin Roitero, and Md Zia Ullah.

Proceedings of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A. July 8-12, 2018. Conference Rank: A\*

#### • IRevalOO: An Object Oriented Framework for Retrieval Evaluation.

Kevin Roitero, Eddy Maddalena, Ponte Yannick and Stefano Mizzaro.

Proceedings of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A. July 8-12, 2018. Conference Rank:  $A^*$ 

### • Effectiveness Evaluation with a Subset of Topics: A Practical Approach.

Kevin Roitero, Michael Soprano and Stefano Mizzaro.

Proceedings of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A. July 8-12, 2018. Conference Rank: A\*

# • CHeap and Engineered Evaluation of Retrieval Systems.

 $\underline{Kevin\ Roitero}$ .

Doctoral Consortium of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A. July 8-12, 2018. Conference Rank: A\*

Year: 2017

#### • Let's Agree to Disagree: Fixing Agreement Measures for Crowdsourcing.

Alessandro Checco, <u>Kevin Roitero</u>, Eddy Maddalena, Gianluca Demartini and Stefano Mizzaro.

Proceedings of the The fifth AAAI Conference on Human Computation and Crowdsourcing, AAAI HCOMP2017. Quebec City, Canada. October 24-26 2017.

# • Considering Assessor Agreement in IR Evaluation.

Eddy Maddalena, <u>Kevin Roitero</u>, Gianluca Demartini and Stefano Mizzaro.

Proceedings of the 3rd ACM International Conference on the Theory of Information Retrieval, ICTIR2017. Amsterdam, Netherlands. October 1-4 2017.

#### • Economic Evaluation of Recommender Systems: A Proposal.

Kevin Roitero, Stefano Mizzaro, and Giuseppe Serra.

Proceedings of the 8th Italian Information Retrieval Workshop, Switzerland. June 05-07, 2017.

# • Do Easy Topics Predict Effectiveness Better Than Difficult Topics?

<u>Kevin Roitero</u>, Eddy Maddalena, and Stefano Mizzaro.

Proceedings of the 39th European Conference on IR Research, ECIR 2017, Aberdeen, UK, April 8-13, 2017. Conference Rank: A

Year: 2016

• Improving the Efficiency of Retrieval Effectiveness Evaluation: Finding a Few Good Topics with Clustering?

Kevin Roitero and Stefano Mizzaro.

Proceedings of the 7th Italian Information Retrieval Workshop, Venezia, Italy, May 30-31, 2016.

#### TALKS

- 25 July 2019. HITS Hits Readersourcing: Validating Peer Review Alternatives Using Network Analysis. ACM SIGIR Conference on Research and Development in Information Retrieval. Paris, France.
- 7 June 2019. Economical Evaluation of Systems: Users as a Signal. Spotify NYC.
- 15 March 2019. Lets Agree to Disagree: Fixing Agreement Measures for Crowdsourcing. European Network for Combining Language Learning with Crowdsourcing Techniques, enetCollect. Lisbon.
- 14 November 2018. Internal Research Talk. Spotify. London, Great Britain.
- 11 July 2018. On fine Grained Relevance Scales. ACM SIGIR Conference on Research and Development in Information Retrieval. Ann Arbor Michigan, U.S.A.
- 17 May 2018. iPython notebooks for data analysis and plotting. RMIT University, Melbourne, Australia.
- 10 May 2018. Crowdsourcing relevance judgments and considering agreement in IR evaluation (with a new agreement measure) RMIT University, Melbourne, Australia.
- 6 June 2017. Economic Evaluation of Recommender Systems: A Proposal. IIR2017, Lugano. Switzerland.
- 10 April 2017. Do Easy Topics Predict Effectiveness Better Than Difficult Topics? ECIR2017, Aberdeen. UK.
- 30 May 2016. Improving the Efficiency of Retrieval Effectiveness Evaluation: Finding a Few Good Topics with Clustering? IIR 2016, Venezia. Italy.
- 12 May 2016. Improving the Efficiency of Retrieval Effectiveness Evaluation: Finding a Few Good Topics with Clustering and Dimensionality Reduction. *MSc Course Web Information Retrieval*). *University of Udine, Udine. Italy.*

#### SKILLS

- Teaching: I delivered the "Operating Systems Laboratory" course at University of Udine in 2016-2017.
- Mentoring: I co-supervised the thesis of 5 Master (MSC), 2 Bachelor (BSC) Students, and various Student advanced projects and seminars. Many of the thesis lead to published results.
- Networking: I worked with various non-homogeneous research groups, building many research partnerships.
- Technical: Proficient in: Python, R, NumPy, SciPy, Pandas, Keras, TensorFlow, PyMC3, SQL, Javascript, BigQuery, LATEX. Familiar with: Java, HTML, CSS, C, WEKA; Basic knowledge of: MATLAB, Scala.
- Platforms/tools: GitHub, Google Cloud Suite, Jupyter Notebooks, Slack, Amazon AWS, Figure Eight, Amazon Mechanical Turk, Docker, Office Suite, Linux Shell, Drobox, Google Drive.
- Languages: Italian (Mother tongue), English (Listening: C1, Reading: C1, Spoken Interaction: C1, Spoken Production: C1, Writing: C1).
- Personal Interests: eager reader, decent runner (12km/1h), film and series watcher, music enthusiast; trying to be the nerd the world needs; keen to minimalism, the art of giving importance to things that really matter.

# Honors, Awards, and Grants

- Research Grant with title "Crowdsourcing an Online Safety Benchmark for Fake News Identification". Provided by Facebook Research. Call title: "The Online Safety Benchmark". Role: Participant.
- Student Grant to attend "ASIRF2019", Schloss Dagstuhl, Germany. Provided by ASIRF.
- Student Grant to attend "SIGIR2019", Paris, France. Provided by ACM SIGIR.
- Participation in the 7th Heidelberg Laureate Forum. Provided by Heidelberg Laureate Forum Foundation (HLFF).
- Invited Talk to European Network for Combining Language Learning with Crowdsourcing Techniques 2019.
- Student Grant to attend "SIGIR2018", Ann Arbor, Michigan, U.S.A. Provided by ACM SIGIR.
- Allowance to visit RMIT ISAR Group at RMIT University, Melbourne, AUS. Provided by RMIT ISAR.
- Student Grant to attend "ICTIR2017", Amsterdam, NE. Provided by ACM SIGIR.
- Allowance to visit Information School at University of Sheffield, UK. Provided by ERASMUS+ Traineeship.
- Student Grant to attend "ECIR2017", Aberdeen, UK. Provided by BCS IRGS.
- Allowance to visit Alpen-Adria-Universität Kalgenfurt, AU. Provided by University of Udine, and ERAMUS Project.