# Michael Soprano, PhD

michael.soprano@uniud.it

https://orcid.org/0000-0002-7337-7592

in https://www.linkedin.com/in/michaelsoprano/

https://michaelsoprano.com/



### **Education**

Nov. 2019 – Jan. 2023 PhD Course, University of Udine, Italy. Cum Laude. Computer Science, Mathematics and Physics,  $35^{th}$  cycle.

Mar. 2015 – Mar. 2018 Master Degree in Computer Science, University of Udine, Italy, 109/110.

Oct. 2011 – Mar. 2015 **Bachelor Degree in Web Technologies and Multimedia**, University of Udine, Italy, 101/110.

Sep. 2006 – Jun. 2011 | High Scool Diploma, I.S.I.S. R. D'Aronco, Gemona del Friuli, Italy, 77/100.

Head Technician Industrial Expert - Computer Science Specialization

### **Visits**

Mar. 2022 – Jul. 2022 Visiting Student, Centrum Wiskunde & Informatica, Amsterdam, The Netherlands

Visiting period as a PhD student.

# **Work Experience**

Jun. 2018 - Oct. 2019

Mar. 2023 - Feb. 2025 Post Doctoral Research Fellow, University of Udine, Italy.

Research project concerning the usage of conversational agents in the public administration.

ministration

**Research Fellow**, University of Udine, Italy.

Research project co-funded by SISSA Medialab

Jun. 2017 – Oct. 2019 Full Stack Web Developer Datamantix S.r.l., Udine, Italy.

Design, development and maintenance of various kinds of web applications and

chatbots.

Development of a web application.

Nov. 2015 – Feb. 2016 **Full Stack Web Developer** Troublezine.

Design, development and maintenance of a web application

# **Publications**

- Roitero, K., **Soprano**, **M.**, Portelli, B., De Luise, M., Spina, D., Mea, V. D., ... Demartini, G. (2023). Can the crowd judge truthfulness? a longitudinal study on recent misinformation about covid-19. *Personal and Ubiquitous Computing*, 27(1), 59–89. Journal Ranks: Journal Citation Reports (JCR) Q2 (2020), Scimago (SJR) Q1 (2021). Odoi:10.1007/s00779-021-01604-6

- Brand, E., Roitero, K., **Soprano**, **M.**, Rahimi, A., & Demartini, G. (2022). A neural model to jointly predict and explain truthfulness of statements. *Journal of Data and Information Quality*, 15(1). Journal Ranks: Journal Citation Reports (JCR) Q3 (2021), Scimago (SJR) Q2 (2021). Odi:10.1145/3546917
- Ceolin, D., Primiero, G., **Soprano**, **M.**, & Wielemaker, J. (2022). Transparent assessment of information quality of online reviews using formal argumentation theory. *Information Systems*, 110, 102107. Journal Ranks: Journal Citation Reports (JCR) Q2 (2021), Scimago (SJR) Q1 (2021).

  6 doi:10.1016/j.is.2022.102107
- Draws, T., La Barbera, D., **Soprano**, **M.**, Roitero, K., Ceolin, D., Checco, A., & Mizzaro, S. (2022). The Effects of Crowd Worker Biases in Fact-Checking Tasks. In 2022 acm conference on fairness, accountability, and transparency (pp. 2114–2124). Odo:10.1145/3531146.3534629
- **Soprano**, **M.**, Roitero, K., Bombassei De Bona, F., & Mizzaro, S. (2022). Crowd\_Frame: A Simple and Complete Framework to Deploy Complex Crowdsourcing Tasks Off-the-Shelf. In *Proceedings of the fifteenth acm international conference on web search and data mining* (pp. 1605–1608). Conference Ranks: GGS A+, Core A\*. *6* doi:10.1145/3488560.3502182
- Brand, E., Roitero, K., **Soprano**, **M.**, & Demartini, G. (2021). E-BART: Jointly Predicting and Explaining Truthfulness. In I. Augenstein, P. Papotti, & D. Wright (Eds.), *Proceedings of the 2021 truth and trust online conference* (pp. 18–27). Virtual Event. Retrieved from <a href="https://truthandtrustonline.com/wp-content/uploads/2021/10/TT02021\_paper\_16-1.pdf">https://truthandtrustonline.com/wp-content/uploads/2021/10/TT02021\_paper\_16-1.pdf</a>
- Ceolin, D., Primiero, G., Wielemaker, J., & **Soprano**, **M.** (2021). Assessing the Quality of Online Reviews Using Formal Argumentation Theory. In M. Brambilla, R. Chbeir, F. Frasincar, & I. Manolescu (Eds.), Web Engineering (pp. 71–87). Conference Ranks (2021): GGS B-, Core B. Ø doi:10.1007/978-3-030-74296-6\_6
- Soprano, M., Roitero, K., La Barbera, D., Ceolin, D., Spina, D., Mizzaro, S., & Demartini, G. (2021). The Many Dimensions of Truthfulness: Crowdsourcing Misinformation Assessments on a Multidimensional Scale. *Information Processing & Management*, 58(6), 102710. Journal Ranks: Journal Citation Reports (JCR) Q1 (2021), Scimago (SJR) Q1 (2021). Odoi:10.1016/j.ipm.2021.102710
- Roitero, K., **Soprano**, **M.**, Portelli, B., Spina, D., Della Mea, V., Serra, G., ... Demartini, G. (2020). The COVID-19 Infodemic: Can the Crowd Judge Recent Misinformation Objectively? In *Proceedings of the 29th acm international conference on information and knowledge management* (pp. 1305–1314). Conference Ranks: GGS A+, Core A. **6** doi:10.1145/3340531.3412048
- Roitero, K., **Soprano**, **M.**, Fan, S., Spina, D., Mizzaro, S., & Demartini, G. (2020). Can The Crowd Identify Misinformation Objectively? The Effects of Judgment Scale and Assessor's Background. In *Proceedings of the 43st International ACM SIGIR Conference on Research and Development in Information Retrieval.* (pp. 439–448). Conference Rank: GGS A++, Core A\*. doi:10.1145/3397271.3401112
- Soprano, M., Roitero, K., & Mizzaro, S. (2019a). Bias and Fairness in Effectiveness Evaluation by Means of Network Analysis and Mixture Models. In Agosti, Maristella and Di Buccio, Emanuele and Melucci, Massimo and Mizzaro, Stefano and Pasi, Gabriella and Silvestri, Fabrizio (Ed.), *Proceedings of the 10th Italian Information Retrieval Workshop* (Vol. 2441, 6–7). Padova, Italy: CEUR-WS.org. Retrieved from \$\mathcal{O}\$ %7Bhttp://ceur-ws.org/Vol-2441/paper4.pdf%7D
- Soprano, M., Roitero, K., & Mizzaro, S. (2019b). HITS Hits Readersourcing: Validating Peer Review Alternatives Using Network Analysis. In Chandrasekaran, Muthu Kumar and Mayr, Philipp (Ed.), Proceedings of the 4th Joint Workshop on Bibliometric-enhanced Information Retrieval and Natural Language Processing for Digital Libraries co-located with the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval (Vol. 2414, 70–82). Paris, France: CEUR-WS.org. Retrieved from § %7Bhttp://ceur-ws.org/Vol-2414/paper7.pdf%7D
- **Soprano**, **M.**, & Mizzaro, S. (2019a). Crowdsourcing Peer Review in the Digital Humanities? In *Book of Abstracts*, 8th AIUCD Conference 2019 Pedagogy, Teaching, and Research in the Age of Digital Humanities

- (p. 251). Udine, Italy. Retrieved from 

  ### http://aiucd2019.uniud.it/wp-content/uploads/2020/03/AIUCD2019-BoA\_DEF.pdf
- Soprano, M., & Mizzaro, S. (2019b). Crowdsourcing Peer Review: As We May Do. In Manghi, Paolo and Candela, Leonardo and Silvello, Gianmaria (Ed.), Digital Libraries: Supporting Open Science (Vol. 988, 259–273). Odo::{10.1007/978-3-030-11226-4\_21}
- Roitero, K., **Soprano**, **M.**, Brunello, A., & Mizzaro, S. (2018). Reproduce and Improve: An Evolutionary Approach to Select a Few Good Topics for Information Retrieval Evaluation. *Journal of Data and Information Quality*, 10(3). Journal Rank: Scimago (SJR) Q2 (2018). Odo::10.1145/3239573
- Roitero, K., **Soprano**, **M.**, & Mizzaro, S. (2018). Effectiveness Evaluation with a Subset of Topics: A Practical Approach. In *The 41st International ACM SIGIR Conference on Research and Development in Information Retrieval* (pp. 1145–1148). Conference Rank: GGS A++, Core A\*.

  6 doi:10.1145/3209978.3210108

# **Metrics**

	Scholar	Scopus	ACM Digital Library
Articles	18	14	11
Citations	160	98	46
Citations / Articles	8.88	7.00	4.18
H-index	6	4	-
i10-index	4	_	-

### **Talks**

Towards a Conversational-Based Agent for Health Services Terzo Convegno Nazionale CINI sull'Intelligenza Artificiale, May 29-31, 2023. Pisa, Italy.

https://www.ital-ia2023.it/submission/96/presentation

Crowd\_Frame: A Simple and Complete Framework to Deploy Complex Crowdsourcing Tasks Off-the-Shelf The 15th ACM International Conference on Web Search and Data Mining, October 19-23, 2020. Phoenix, U.S.A. Online, held remotely due to COVID-19 (pre-recorded contribution).

https://dl.acm.org/doi/abs/10.1145/3488560.3502182 supplemental material section

- The COVID-19 Infodemic: Can the Crowd Judge Recent Misinformation Objectively?

  20th ACM International Conference on Information and Knowledge Management, October 19-23,
  2020. Galway, Ireland. Online, held remotely due to COVID-19 (pre-recorded contribution).

  https://dl.acm.org/doi/10.1145/3340531.3412048

  supplemental material section
  - Can The Crowd Identify Misinformation Objectively? The Effects of Judgment Scale and Assessor's Background 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval, July 25-30, 2020. Xi'an, China. Online, held remotely due to COVID-19 (pre-recorded contribution).

https://www.youtube.com/watch?v=D10EtrThvbc https://dl.acm.org/doi/abs/10.1145/3397271.3401112 supplemental material section

Bias and Fairness in Effectiveness Evaluation by Means of Network Analysis and Mixture Model Italian Information Retrieval Workshop, September 16-18, 2019. Padova, Italy. https://docs.google.com/presentation/d/1F751FzwnxZjA0y0ctZy91BWEJzlCV19L9fF50Cn20Lo/edit?usp=sharing

# **Teaching**

- Social Computing, Bachelor's Degree in Internet of Things, Big Data & Web, University of Udine. Academic Year 2022/2023. Lectures: 2. Hours: 4.
- Social Computing, Bachelor's Degree in Internet of Things, Big Data & Web, University of Udine. Academic Year 2021/2022. Lectures: 6. Hours: 12.
- Social Computing, Bachelor's Degree in Internet of Things, Big Data & Web, University of Udine. Academic Year 2020/2021. Lectures: 6. Hours: 12.

# **Academic Activity**

### **Organizational Roles**

Fourth Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2022), Rome, Italy. Proceedings and Website Chair.

### **Program Committee Roles**

- 2023 Asth European Conference on Information Retrieval (ECIR 2023), Dublin, Ireland. Short Paper Track.
- 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2022), Madrid, Spain. Short Paper Track.
- Third Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2021), Online.

#### Reviewer

- 2023 Springer Nature Scientific Report.
  - 13th Italian Information Retrieval Workshop (IIR 2023), Pisa, Italy.
- 2022 Information Processing & Management.
  - Tenth AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2022), Online.
  - Conference and Labs of the Evaluation Forum (CLEF 2022), Bologna, Italy.
  - 44th European Conference on Information Retrieval (ECIR 2022), Stavanger, Norway.
  - Second Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2021), Delft, Netherlands (Online).
- 30th ACM International Conference On Information And Knowledge Management (CIKM 2021), Online.
  - 32nd ACM Conference on Hypertext and Social Media, (HT 2021), Online.
- 2020 29th ACM International Conference On Information And Knowledge Management (CIKM 2020), Galway, Ireland (Online).
  - 31st ACM Conference on Hypertext and Social Media (HT 2020), Online.
- 2019 | 15th Italian Research Conference On Digital Libraries (IRCDL 2019), Pisa, Italy.

# Mentoring

2020 – 2023 Co-supervision of the thesis of 2 Master (MSC), 11 Bachelor (BSC) Students, and various students advanced projects and seminars

#### **Affiliations**

Member of the SMDC Laboratory (Social, Mobile, Data, Crowd), see http://smdc.uniud.it/smdc/membri/?lang=en

### **Honors & Grants**

Student Grant, 15th ACM International Conference on Web Search and Data Mining (WSDM 2022), Phoenix, U.S.A. Online (Held remotely due to COVID-19). Provided by WSDM. Free conference subscription.

Student Grant, 29th ACM International Conference On Information And Knowledge Management (CIKM 2020), Galway, Ireland. Online (Held remotely due to COVID-19). Provided by CIKM. Free conference subscription.

**Volunteer**, 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2020), Xi'an, China. Online (Held remotely due to COVID-19). Provided by SIGIR. Free conference subscription.

# References

Available on Request

### Links

 $\textbf{Google Scholar}: \verb|https://scholar.google.com/citations?| user=ocK0qRUAAAAJ| | a scholar | a schol$ 

**ORCID**: https://orcid.org/0000-0002-7337-7592

DBLP: https://dblp.org/pid/222/1241.html

Mendeley: https://www.mendeley.com/profiles/michael-soprano/

Scopus: https://www.scopus.com/authid/detail.uri?authorId=57203392311

ACM Digital Library: https://dl.acm.org/profile/99659280921

In compliance with the GDPR and the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.

Last update: June 8th, 2023