

# Michael Soprano, PhD

✉ [michael.soprano@uniud.it](mailto:michael.soprano@uniud.it)

🐙 Miccighel      🐦 @Miccighel\_

🆔 <https://orcid.org/0000-0002-7337-7592>

🌐 <https://www.linkedin.com/in/michaelsoprano/>

🌐 <https://michaelsoprano.com/>



## Istruzione

- Nov. 2019 – Gen. 2023      📖 **Dottorato in Informatica e Scienze Matematiche e Fisiche**, Cum Laude. 35° ciclo, Università degli Studi di Udine, Italia.
- Mar. 2015 – Mar. 2018      📖 **Laurea Magistrale in Informatica**, 109/110. Università degli Studi di Udine, Italia.
- Ott. 2011 – Mar. 2015      📖 **Laurea Triennale in Tecnologie Web e Multimediali**, 101/110. Università degli Studi di Udine, Italia.
- Set. 2006 – Giu. 2011      📖 **Diploma di Scuola Secondaria**, Perito Industriale Capotecnico - Specializzazione Informatica, 77/100. I.S.I.S. R. D'Aronco, Gemona del Friuli, Italia.





## Visite

- Mar. 2022 – Jul. 2022      📖 **Studente in visita**, Centrum Wiskunde & Informatica, gruppo “Human-Centered Data Analytics” (HCDA). Amsterdam, Paesi Bassi. Periodo di visita durante il dottorato.








## Esperienza lavorativa

- Dic. 2023 - In Corso      📖 **Assegnista di ricerca (PostDoc)**. Dipartimento di Scienze Matematiche, Informatiche e Fisiche (DMIF), Università degli Studi di Udine, Italia.  
Progetto EU PRIN 2022 Next Generation “20227F2ZN3 MoT-The Measure of Truth: An Evaluation-Centered Machine-Human Hybrid Framework for Assessing Information Truthfulness”  
Definizione di un framework di valutazione per i sistemi di rilevamento della disinformazione, considerando vari aspetti come la creazione di set di dati adeguatamente etichettati, prevenendo i pregiudizi nella loro definizione e stabilendo misure di valutazione adeguate che tengano specificamente conto del concetto di veridicità dell'informazione.
- Mar. 2023 - Nov. 2023      📖 **Assegnista di ricerca (PostDoc)**. Dipartimento di Scienze Economiche e Statistiche (DIES), Università degli Studi di Udine, Italia.  
Progetto di ricerca incentrato sull'esplorazione di applicazioni eGovernment basate su agenti conversazionali per la pubblica amministrazione italiana, con particolare enfasi sulla sanità.
- Gen. 2022 - Mar. 2022      📖 **Lavoratore autonomo**. Dipartimento Politecnico di Ingegneria e Architettura (DPIA), Università degli Studi di Udine, Italia.  
Sviluppo di un'applicazione web dedicata alla comparabilità e riproducibilità dei risultati di ricerca nel campo dell'ottimizzazione combinatoria.

## Esperienza lavorativa (continued)

- Giu. 2018 - Ott. 2019     **Assegnista di ricerca.** Dipartimento di Scienze Matematiche, Informatiche e Fisiche (DMIF), Università degli Studi di Udine, Italia.  
Progetto di ricerca cofinanziato da SISSA Medialab dedicato alla progettazione, implementazione ed valutazione di un ecosistema che fornisce un'alternativa all'attività di revisione tra pari nel processo di pubblicazione di articoli scientifici.
- Giu. 2017 – Ott. 2019     **Lavoratore autonomo.** Datamantix S.r.l., Udine, Italia.  
Progettazione, sviluppo e manutenzione come sviluppatore web full-stack di varie tipologie di applicazioni web e di un chatbot.
- Ago. 2017 – Feb. 2018     **Lavoratore autonomo.** Archeido S.r.l., Udine, Italia.  
Sviluppo, in veste di sviluppatore web full-stack, di un'applicazione web per la gestione e la visualizzazione di asset finanziari.
- Nov. 2015 – Feb. 2016     **Lavoratore autonomo.** Troublezine.  
Design, sviluppo e manutenzione come sviluppatore web full-stack di un blog che offre notizie ed eventi legati alla musica.

## Pubblicazioni

- 1 Singh, J., **Soprano, M.**, Roitero, K., & Ceolin, D. (2024). Crowdsourcing Statement Classification to Enhance Information Quality Prediction. In M. Preuss, A. Leszkiewicz, J.-C. Boucher, O. Fridman, & L. Stampe (Eds.), *Proceedings of the 6th multidisciplinary international symposium on disinformation in open online media (misdoom 2024)* (pp. 70–85).  doi:10.1007/978-3-031-71210-4\_5
- 2 **Soprano, M.**, Roitero, K., Gadiraju, U., Maddalena, E., & Demartini, G. (2024). Longitudinal Loyalty: Understanding The Barriers To Running Longitudinal Studies On Crowdsourcing Platforms. *ACM Transactions on Social Computing*. Journal Rank: Scimago (SJR) Q2 (2023).  doi:10.1145/3674884
- 3 La Barbera, D., Maddalena, E., **Soprano, M.**, Roitero, K., Demartini, G., Ceolin, D., ... Mizzaro, S. (2024). Crowdsourced Fact-checking: Does It Actually Work? *Information Processing & Management*, 61(5), 103792. Journal Ranks: Journal Citation Reports (JCR) Q1 (2023), Scimago (SJR) Q1 (2023).  doi:10.1016/j.ipm.2024.103792
- 4 **Soprano, M.**, Roitero, K., La Barbera, D., Ceolin, D., Spina, D., Demartini, G., & Mizzaro, S. (2024). Cognitive Biases in Fact-Checking and Their Countermeasures: A Review. *Information Processing & Management*, 61(3), 103672. Journal Ranks: Journal Citation Reports (JCR) Q1 (2022), Scimago (SJR) Q1 (2022).  doi:10.1016/j.ipm.2024.103672
- 5 **Soprano, M.**, Roitero, K., Della Mea, V., & Mizzaro, S. (2023). Towards a Conversational-Based Agent for Health Services. In F. Falchi, F. Giannotti, A. Monreale, C. Boldrini, S. Rinzivillo, & S. Colantonio (Eds.), *Proceedings of the Italia Intelligenza Artificiale - Thematic Workshops co-located with the 3rd CINI National Lab AIIS Conference on Artificial Intelligence* (Vol. 3486, pp. 278–283). Pisa, Italy: CEUR-WS.org. Retrieved from  <https://ceur-ws.org/Vol-3486/96.pdf>
- 6 La Barbera, D., **Soprano, M.**, Roitero, K., Maddalena, E., & Mizzaro, S. (2023). Fact-Checking at Scale with Crowdsourcing: Experiments and Lessons Learned. In F. M. Nardini, N. Tanelotto, G. Faggioli, & A. Ferrara (Eds.), *Proceedings of the 13th Italian Information Retrieval Workshop* (Vol. 3448, pp. 85–90). Pisa, Italy: CEUR-WS.org. Retrieved from  <https://ceur-ws.org/Vol-3448/paper-18.pdf>
- 7 Roitero, K., Barbera, D. L., **Soprano, M.**, Demartini, G., Mizzaro, S., & Sakai, T. (2023). How Many Crowd Workers Do I Need? On Statistical Power When Crowdsourcing Relevance Judgments. *ACM Transactions on Information Systems*. Journal Ranks: Journal Citation Reports (JCR) Q1 (2021), Scimago (SJR) Q1 (2021).  doi:10.1145/3597201

- 8 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). [doi:10.1145/3546917](https://doi.org/10.1145/3546917)
- 9 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). [doi:10.1016/j.is.2022.102107](https://doi.org/10.1016/j.is.2022.102107)
- 10 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). [doi:10.1145/3531146.3534629](https://doi.org/10.1145/3531146.3534629)
- 11 **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\*. [doi:10.1145/3488560.3502182](https://doi.org/10.1145/3488560.3502182)
- 12 **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). [doi:10.1016/j.ipm.2021.102710](https://doi.org/10.1016/j.ipm.2021.102710)
- 13 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 [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)
- 14 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. [doi:10.1007/978-3-030-74296-6\\_6](https://doi.org/10.1007/978-3-030-74296-6_6)
- 15 Roitero, K., **Soprano, M.**, Portelli, B., De Luise, M., Spina, D., Mea, V. D., ... Demartini, G. (2021). 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). [doi:10.1007/s00779-021-01604-6](https://doi.org/10.1007/s00779-021-01604-6)
- 16 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. [doi:10.1145/3340531.3412048](https://doi.org/10.1145/3340531.3412048)
- 17 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 43rd 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](https://doi.org/10.1145/3397271.3401112)
- 18 **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 <https://ceur-ws.org/Vol-2441/paper4.pdf>
- 19 **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 <https://ceur-ws.org/Vol-2414/paper7.pdf>

- 20 **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](http://aiucd2019.uniud.it/wp-content/uploads/2020/03/AIUCD2019-BoA_DEF.pdf)
- 21 **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). [doi:10.1007/978-3-030-11226-4\\_21](https://doi.org/10.1007/978-3-030-11226-4_21)
- 22 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). [doi:10.1145/3239573](https://doi.org/10.1145/3239573)
- 23 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\*. [doi:10.1145/3209978.3210108](https://doi.org/10.1145/3209978.3210108)

## Metriche




	Scholar	Scopus	ACM Digital Library
Articoli	24	19	13
Citazioni	303	164	87
Citazioni / Articolo	12.62	8.69	6.21
H-index	8	6	–
h-index	7	–	–

## Presentazioni

- 2023  **Towards a Conversational-Based Agent for Healthcare.** *CARE: Conversational Agents and Responsible Ethics in Healthcare - Workshop at the European Federation of Medical Informatics Special Topic Conference 2023*, 27 Ottobre 2023. Torino, Italia. [https://docs.google.com/presentation/d/1IZaI38oOJ3FktP79dINPOL\\_9LqXmQf-a3TC7vf5qmfU/edit?usp=sharing](https://docs.google.com/presentation/d/1IZaI38oOJ3FktP79dINPOL_9LqXmQf-a3TC7vf5qmfU/edit?usp=sharing)
-  **Towards a Conversational-Based Agent for Health Services** *Terzo Convegno Nazionale CINI sull'Intelligenza Artificiale*, 29 Maggio 2023. Pisa, Italia. <https://www.ital-ia2023.it/submission/96/presentation>
- 2022  **Longitudinal Loyalty: Understanding the Barriers to Running Longitudinal Studies on Crowdsourcing Platforms** *Centrum Wiskunde & Informatica*, 16 Giugno 2022. Amsterdam, Paesi Bassi. [https://docs.google.com/presentation/d/1YBHKOKY\\_TdaCfw09-pqm\\_jDGKYUiyXaKXj35pR3pSoM/edit?usp=sharing](https://docs.google.com/presentation/d/1YBHKOKY_TdaCfw09-pqm_jDGKYUiyXaKXj35pR3pSoM/edit?usp=sharing)
-  **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*, 15 Febbraio 2022. Phoenix, U.S.A. Tenutosi da remoto come contributo pre-registrato, a causa dell'epidemia di COVID-19. <https://dl.acm.org/doi/abs/10.1145/3488560.3502182> (sezione supplemental material)





## Presentazioni (continued)

---

- 2020     **The COVID-19 Infodemic: Can the Crowd Judge Recent Misinformation Objectively?** *29th ACM International Conference on Information and Knowledge Management*, 19 Ottobre 2020. Galway, Irlanda. Tenutosi da remoto come contributo pre-registrato, a causa dell'epidemia di COVID-19. <https://dl.acm.org/doi/10.1145/3340531.3412048> (sezione *supplemental material*).
-  **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*, 25 Luglio 2020. Xi'an, China. Tenutosi da remoto come contributo pre-registrato, a causa dell'epidemia di COVID-19. <https://dl.acm.org/doi/abs/10.1145/3397271.3401112> (sezione *supplemental material*)
- 2019     **Bias and Fairness in Effectiveness Evaluation by Means of Network Analysis and Mixture Model** *Italian Information Retrieval Workshop*, 16 Settembre 2019. Padova, Italia. <https://docs.google.com/presentation/d/1F751FzwnxZjA0y0ctZy91BWEJzLCV19L9pF50Cn20Lo/edit?usp=sharing>

## Insegnamento





---

- 2023-2024     **Social Computing**, Laurea Triennale in Internet of Things, Big Data & Web, Università degli Studi di Udine. Lezioni: 2. Ore: 4.
- 2022-2023     **Social Computing**, Laurea Triennale in Internet of Things, Big Data & Web, Università degli Studi di Udine. Lezioni: 2. Ore: 4.
- 2021-2022     **Social Computing**, Laurea Triennale in Internet of Things, Big Data & Web, Università degli Studi di Udine. Lezioni: 6. Ore: 12.
- 2020-2021     **Social Computing**, Laurea Triennale in Internet of Things, Big Data & Web, Università degli Studi di Udine. Lezioni: 6. Ore: 12.






## Attività accademica

---

### Ruoli organizzativi

- 2025     21th Italian Research Conference on Digital Libraries (IRCDL 2025), Udine. *Website Chair*. <https://ircdl2025.uniud.it/>
- 2024     14th Italian Information Retrieval Workshop (IIR 2024), Udine, 5-6 Settembre. *Website Chair*. <https://iir2024.uniud.it/>
- 2023     CARE: Conversational Agents and Responsible Ethics in Healthcare - Workshop at the European Federation of Medical Informatics Special Topic Conference 2023 (EFMI STC 2023), Torino, 27 Ottobre. *Organizer*.
- 2022     Fourth Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2022), Online, 12-13 Ottobre. *Proceedings and Website Chair*. <https://bhcc2022.org/>.

### Membro del comitato di programma














- 2024     12th AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2024), Pittsburgh, Pennsylvania, USA. *Full Papers Track*.
-  47th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2024), Washington D.C., USA. *Full and Short Papers Tracks*.
- 2023     45th European Conference on Information Retrieval (ECIR 2023), Dublino, Irlanda. *Short Papers Track*.
- 2022     45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2022), Madrid, Spagna. *Short Papers Track*.
- 2021     Third Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2021), Online.




## Attività accademica (continued)

---


### Revisore

- 2023  Information Processing & Management. <https://portal.issn.org/resource/ISSN/0306-4573>. Contributo registrato su profilo ORCID.
-  Springer Nature Scientific Report. <https://portal.issn.org/resource/ISSN/2045-2322>.
-  13th Italian Information Retrieval Workshop (IIR 2023), Pisa, Italia.
- 2022  Information Processing & Management. <https://portal.issn.org/resource/ISSN/0306-4573>.
-  Tenth AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2022), Online.
-  Conference and Labs of the Evaluation Forum (CLEF 2022), Bologna, Italia.
-  44th European Conference on Information Retrieval (ECIR 2022), Stavanger, Norvegia.
-  Second Symposium on Biases in Human Computation and Crowdsourcing (BHCC 2021), Delft, Paesi Bassi (Online).
- 2021  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, Irlanda (Online).
-  31st ACM Conference on Hypertext and Social Media (HT 2020), Online.
- 2019  15th Italian Research Conference On Digital Libraries (IRCDL 2019), Pisa, Italia.

### Supervisione




- 2020 – In Corso  **Co-supervisione** di 6 tesi magistrali, 13 tesi triennali e vari laboratori avanzati e seminari di studenti.

### Affiliazioni

- 2021 – In Corso  **Membro** del laboratorio Social, Mobile, Data & Crowd (SMDC), si veda: <https://smdc.uniud.it/smdc/membri/>

## Riconoscimenti

---

- 2022  **Student grant**, *15th ACM International Conference on Web Search and Data Mining (WSDM 2022)*, Phoenix, U.S.A. Tenutasi da remoto a causa dell'epidemia di COVID-19. Fornito da WSDM. Registrazione gratuita al convegno.
- 2020  **Student grant**, *29th ACM International Conference On Information And Knowledge Management (CIKM 2020)*, Galway, Irlanda. Tenutasi da remoto a causa dell'epidemia di COVID-19. Fornito da CIKM. Registrazione gratuita al convegno.
- 2019  **Volontario**, *43rd International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2020)*, Xi'an, Cina. Tenutasi da remoto a causa dell'epidemia di COVID-19. Fornito da SIGIR. Registrazione gratuita al convegno.

## Referenze

---

Disponibili su richiesta.

## Collegamenti

---

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

**Google Scholar:** <https://scholar.google.com/citations?user=ock0qRUAAAJ>

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

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

**Web of Science:** <https://www.webofscience.com/wos/author/record/JDD-6660-2023>

**DBLP:** <https://dblp.org/pid/222/1241.html>

**ResearchGate:** <https://www.researchgate.net/profile/Michael-Soprano>

**Kudos:** [https://www.growkudos.com/profile/michael\\_soprano](https://www.growkudos.com/profile/michael_soprano)

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

*Autorizzo il trattamento dei miei dati personali ai sensi del GDPR 679/16 e del Decreto Legislativo 30 giugno 2003 n. 196  
"Codice in materia di protezione dei dati personali" ai fini di attività di ricerca e selezione del personale e contatti lavorativi.*

Ultimo aggiornamento: 2 Settembre 2024