Giovanni Campagna

Contact information

Phone: +1 650 283 5150
E-mail: gcampagn@cs.stanford.edu, giovanni.campagna@hotmail.com
Web: https://web.stanford.edu/~gcampagn/ https://www.linkedin.com/in/gcampagna/
Mailing Address: 1331 Jefferson Ave, Apt 302, Redwood City, CA, 94062, USA

Education

- PhD in Computer Science
  Stanford University 2016 – 2021 (expected)
  Thesis (expected): "ThingTalk: A Language for a Privacy-Preserving End-User Programmable Virtual Assistant"
- MS in Computer Science (Software Theory track)
  Stanford University 2014 – 2016
- B.Eng. in Engineering of Computer Systems
  Politecnico di Milano 2011 – 2014

Work experiences

- Stanford University Stanford, CA (USA) Sep 2015 – present
  Graduate research assistant in the Open Virtual Assistant Lab, working on the Almond virtual assistant project. As part of this project he developed the ThingTalk language for end-user-programming, the Thingpedia open API platform, and a novel training strategy for neural semantic parsers. He also collected the Almond dataset.
- Google Sunnyvale, CA (USA) Jun 2018 – Sep 2018
  Software engineering intern in research, working on improving end-to-end trainable automated dialog agents
- Microsoft Redmond, WA (USA) Jun 2015 – Sep 2015
  Software engineering intern, working in the Office Graphics team on SVG image support
- Red Hat Brno (CZ) Jul 2013 – Sep 2013
  Software developer intern, working on multi-monitor compositor support for GNOME
- GNOME Foundation 2011 – 2015
  Software developer and maintainer for various user-facing components (including the GNOME Shell and the GNOME Weather application) of this GNU/Linux desktop
- International Olympiads in Informatics Sirmione (IT) Sep 2012
  Member of the Host Scientific Committee, reviewing problem sets and preparing official solutions
- Italian National Olympiads in Informatics Volterra (IT) 2011 – 2014
  Instructor for the Italian national team, teaching problem solution techniques (dynamic programming, search algorithms, graph theory), as well as the C++ language and standard library, in 4 week-long sessions per year
- Google Summer of Code Summer 2014
  Mentor for the GNOME Foundation with a student who was working on a frontend/UX project

Publications

- "DIY Assistant: A Multi-Modal End-User Programmable Virtual Assistant" Michael H. Fischer*, G. C.*, Euirim Choi, Monica S. Lam. In *Proceedings of the 42nd ACM SIGPLAN International Conference on Programming Language Design and Implementation (PLDI 2021)*, June 2021.
- "Grounding Open-Domain Instructions to Automate Web Support Tasks" Nancy Xu, Sam Masling, Michael Du, G. C., Larry Heck, James Landay, Monica S Lam. In *Proceedings of the 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL-HLT 2021)*, June 2021.
- "AutoQA: From Databases To Q&A Semantic Parsers With Only Synthetic Training Data" Silei Xu*, Sina J. Semnani*, G. C., Monica S. Lam. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing*, November 2020.
- "Localizing Open-Ontology QA Semantic Parsers in a Day Using Machine Translation" Mehrad Moradshahi, G. C., Sina J. Semnani, Silei Xu, Monica S. Lam. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing*, November 2020.
- "Soteria: A Provably Compliant User Right Manager Using a Novel Two-Layer Blockchain Technology" Wei-Kang Fu, Yi-Shan Lin, G. C., Chun-Ting Liu, De-Yi Tsai, Chung-Huan Mei, Edward Y. Chang, Shih-Wei Liao, Monica S. Lam. In *IEEE Infrastructure Conference*, October 2020.
- "Schema2QA: High-Quality and Low-Cost Q&A Agents for the Structured Web" Silei Xu, G. C., Jian Li, and Monica S. Lam. In *Proceedings of the 29th ACM International Conference on Information and Knowledge Management*, October 2020.
- "Zero-Shot Transfer Learning with Synthesized Data for Multi-Domain Dialogue State Tracking" G. C., Agata Foryciarz, Mehrad Moradshahi, and Monica S. Lam. In *Proceedings of the 58th Annual Meeting of the*

Association for Computational Linguistics (Volume 1: Long Papers), July 2020.

- "Genie: A Generator of Natural Language Semantic Parsers for Virtual Assistant Commands" G. C.*, Silei Xu*, Mehrad Moradshahi, Richard Socher, and Monica S. Lam. In *Proceedings of the 40th ACM SIGPLAN Conference on Programming Language Design and Implementation*, Phoenix, AZ, June 2019.
- "Controlling Fine-Grain Sharing in Natural Language with a Virtual Assistant", G.C., Silei Xu, Rakesh Ramesh, Michael Fischer, and Monica S. Lam. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, volume 2, issue 3 (2018).
- "Brassau: Automatically Generating Graphical User Interfaces for Virtual Assistants", Michael Fischer, G.C., Silei Xu, and Monica S. Lam. In *Proceedings of the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2018)*.
- "Almond: The Architecture of an Open, Crowdsourced, Privacy-Preserving, Programmable Virtual Assistant", G.C., Rakesh Ramesh, Silei Xu, Michael Fisher, and Monica S. Lam. In *Proceedings of the 26th International World Wide Web Conference 2017*, Perth, Australia, 2017
- "Efficient communication and collection with compact normal forms", Edward Z. Yang, G.C., Ömer S. Ağacan, Ahmed El-Hassany, Abhishek Kulkarni, and Ryan R. Newton. In *Proceedings of the 20th ACM SIGPLAN International Conference on Functional Programming*. Vancouver (BC), 2015

Prizes and Acknowledgments

- Siebel Foundation Scholar, class of 2016
- Participant at the International Olympiads in Informatics (high school programming and algorithm design contest) (Thailand, 2011)
- "Prize for the study of mathematics and informatics in high schools" by Banca d'Italia (2011)