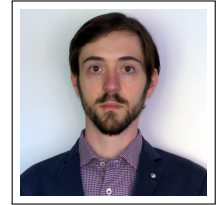


Stefano Bennati

Curriculum Vitae

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🏠 bennati.me
Italian, Work permit B



WORK EXPERIENCE



Research Engineer, Privacy Services Team

HERE TEchnologies

Zürich, CH

November 2019 – Present

Ideation and implementation of anonymization algorithm for location data, measurements for location privacy.



Research Assistant

ETH Zürich

Zürich, CH

July 2014 — October 2019

PhD Thesis (June 2018): Machine learning for autonomous privacy preservation in participatory sensing and smart cities.

Privacy research in the scenarios of Participatory Sensing and Smart Cities. Developed algorithms for Data Privacy. Designed and developed multi-agent simulation environments. Validated results with real-world data.



Research Programmer

Carnegie Mellon University

Pittsburgh, PA

June 2013 — June 2014

Researched and modeled human decision-making in scenarios such as cybersecurity and swarm robotics. Developed models of human cognition based on cognitive architectures. Validated model against machine learning techniques.



Research Assistant

University of Freiburg

Freiburg, DE

April 2012 — April 2013

Researched human spatial cognition. Developed models of spatial cognition. Designed behavioral experiments. Developed algorithms of navigation for cognitive robotics.

EDUCATION



Masters of Science in Informatics Engineering

University of Brescia

First Class Honours

Brescia, IT

October 2008 — March 2012

Artificial Intelligence, Software Engineering, HCI, Statistics, TLC Networks.

COURSES



Project Management Leadership Skills

ETH Zürich

Zürich, CH

April 2017

Team communication, Team set-up and building, Conflict management.



Project Management for Research

ETH Zürich

Zürich, CH

November 2016

Project structure, time and workload planning, Track and control, Risk management.



Design Thinking (University-level course)

ETH Zürich

Zürich, CH

September 2015 – February 2016

Won third place at ETH Entrepreneur Club Award 2016.

WORKSHOPS & SCHOOLS



TdLab Winter School "Science meets Practice"

ETH Zürich

Zürich, CH

January 2018

Transdisciplinary research, engagement with the public.

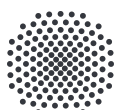


Advanced Statistics and Data Mining Summer School

Univ. Politécnica de Madrid

Madrid, ES

July 2015



Parallel Programming Workshop (MPI & OpenMP)

HLRS, Stuttgart University

Stuttgart, DE

October 2014



Int'l Spatial Cognition Summer Institute (ISCSI)

University of California

Santa Barbara, CA

August 2013

SKILLS

PROGRAMMING	Python *** C++ *** Testing (Nosetests) ** Parallel programming (OpenMP, MPI) ** Lisp ** Keras/TensorFlow * Java *
DATA ANALYSIS	Pandas *** SciPy *** Scikit-Learn ** R ** MapReduce *
VISUALIZATION	Matplotlib *** ggplot2 ** R **
TOOLS	Emacs *** L ^A T _E X *** Git(Hub) <u>Link</u> *** *nix development (Bash) ***
COMPETENCES	Data Privacy *** SysAdmin (*nix based) *** Project Management *** System Design *** Scrum / Agile development ** Design Thinking ** Mentoring ** Cryptography * Cyber Security *
SOFT SKILLS	Work in international/interdisciplinary teams Precise/Attention to detail Reliable/punctual Problem solving Organized Independent Self-motivated Team-player Creative Conflict management Communication
LANGUAGES	English C2 German B2/C1 Italian Native
HOBBIES	Travel Photography Cooking Videogames Hiking Boardgames Reading

Legend:

- * Theoretical knowledge, little practical experience
- ** Good practical experience, < 3 years
- *** Excellent practical experience, > 3 years

PUBLICATIONS

- [1] L. Aguilar, S. Bennati, and D. Helbing. How learning can change the course of evolution. *PloS one*, 14(9), 2019.
- [2] S. Bennati. On the role of collective sensing and evolution in group formation. *Swarm Intelligence*, feb 2018.
- [3] S. Bennati, S. Brussow, M. Ragni, and L. Konieczny. Gestalt effects in planning: Rush-hour as an example. In *Proceedings of the Cognitive Science Society*, volume 36, 2014.
- [4] S. Bennati, I. Dusparic, R. Shinde, and C. M. Jonker. Volunteers in the Smart City: Comparison of Contribution Strategies on Human-Centered Measures. *arXiv preprint arXiv:1805.09090*, 5 2018.
- [5] S. Bennati and C. M. Jonker. Protocol for privacy-respecting distributed event detection. *Proceedings of the Conference on Complex Systems (CCS) 2016*, 2016.
- [6] S. Bennati and C. M. Jonker. Primal: A privacy-preserving machine learning method for event detection in distributed sensor networks. *arXiv preprint arXiv:1703.07150*, 2017.
- [7] S. Bennati and E. Pournaras. Incentivized data sharing via group-level privacy-preservation. In *3rd Annual International Conference on Computational Social Science (IC2S2 2017)*, 2017.
- [8] S. Bennati and E. Pournaras. Privacy-enhancing aggregation of internet of things data via sensors grouping. *Sustainable Cities and Society*, 39:387 – 400, 2018.
- [9] S. Bennati and M. Ragni. Modelling spatial relations’ influence on planning.
- [10] S. Bennati and M. Ragni. Cognitive robotics: Analysis of preconditions and implementation of a cognitive robotic system for navigation tasks. *Nele Rußwinkel/ Uwe Drewitz/ Hedderik van Rijn (eds.)*, page 157, 2012.
- [11] C. Lebiere, S. Bennati, R. Thomson, P. Shakarian, and E. Nunes. Functional cognitive models of malware identification. *Proceedings of ICCM, ICCM*, pages 9–11, 2015.
- [12] E. Nunes, C. Buto, P. Shakarian, C. Lebiere, S. Bennati, R. Thomson, and H. Jaenisch. Malware task identification: A data driven approach. In *Proceedings of the 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining 2015*, pages 978–985. ACM, 2015.
- [13] E. Rizzardi, S. Bennati, and M. Ragni. How to build an inexpensive cognitive robot. *Cognitive processing*, 15(1):131–134, 2014.
- [14] P. Shakarian, E. Nunes, C. Buto, C. Lebiere, R. Thomson, and S. Bennati. Systems and methods for data driven malware task identification, June 17 2016. US Patent App. 15/186,278.
- [15] P. R. Smart, Y. Tang, P. Stone, K. Sycara, S. Bennati, C. Lebiere, D. Mott, D. Braines, and G. Powell. Socially-distributed cognition and cognitive architectures: towards an act-r-based cognitive social simulation capability. 2014.

- [16] B. Tabibian, M. Lewis, C. Lebiere, N. Chakraborty, K. Sycara, S. Bennati, and M. Oishi. Towards a cognitively-based analytic model of human control of swarms. In *2014 AAAI Spring Symposium Series*, 2014.
- [17] R. Thomson, S. Bennati, and C. Lebiere. Extending the influence of contextual information in act-r using buffer decay. In *Proceedings of the Cognitive Science Society*, volume 36, 2014.
- [18] R. Thomson, C. Lebiere, and S. Bennati. A general instance-based model of sensemaking in a functional architecture.
- [19] R. Thomson, C. Lebiere, and S. Bennati. Human, model and machine: a complementary approach to big data. In *Proceedings of the 2014 Workshop on Human Centered Big Data Research*, page 27. ACM, 2014.
- [20] R. Thomson, C. Lebiere, S. Bennati, P. Shakarian, and E. Nunes. Malware identification using cognitively-inspired inference. *Proceedings of BRIMS, BRIMS*, 2015.