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Summary: I am Research Assistant Professor at the USC Department of Computer Science, Research Team Leader at the USC Information Sciences Institute, and a PI in the *Machine Intelligence and Data Science* (MINDS) lab at USC/ISI. My research advances AI and Machine Learning to model and predict human behavior in techno-social systems. I received the **DARPA Young Faculty Award**, the **DARPA Director's Fellowship**, the **Complex System Society Junior Scientific Award** and the **USC Viterbi Junior Research Award**. I am Principal Investigator of projects for **\$6.2M**, and Co-PI of projects for **\$9.4M**. I currently support and oversee 4 postdocs and 8 PhD students in my lab, as well as 10 USC master students and 7 undergrads who are volunteers or supported as student workers.

Academic Appointments

USC Viterbi Department of Computer Science, Los Angeles, CA (USA)

- Research Assistant Professor of Computer Science 08/2016–Present
- Associate Director for Applied Data Science and Undergraduate Programs 08/2018–Present

USC Information Sciences Institute (ISI), Marina del Rey, CA (USA)

- Research Team Leader 08/2018–Present
- Research Lead 08/2016-07/2018
- Computer Scientist 08/2015-07/2016

Kobe University, Kobe, Japan

- Research Fellow, Center for Computational Social Science (CCSS) 12/2018–Present

University of California, Los Angeles (UCLA), Los Angeles, CA (USA)

- Senior Fellow, Institute for Pure & Applied Mathematics (IPAM) 01/2016-06/2016

Indiana University, Bloomington, IN (USA)

- School of Informatics and Computing
 - Research Assistant Professor 01/2015-07/2015
 - Postdoctoral Research Fellow 04/2012-12/2014
- Indiana University Network Science Institute (IUNI)
 - Assistant Research Scientist 01/2015-07/2015

Research Awards as Principal Investigator (PI/Co-PI)

2017-21 *COSINE: Cognitive Online Simulation of Information Network Environments*

Principal Investigator: This project is funded by the **DARPA SocialSim** program.

Total amount: **\$4.95 Millions** — Award number: W911NF-17-C-0094

Collaborators: Kristina Lerman (Co-PI)

2018-20 *MITIGATE: Modeling Individual Trajectories and Incentives in Gamified Techno-social Systems*

Principal Investigator: This project is funded by the **2018 DARPA Director's Fellowship**.

Total amount: **\$450,000** — Award number: D16AP00115

2016-18 *MITIGATE: Modeling Individual Trajectories and Incentives in Gamified Techno-social Systems*

Principal Investigator: This project is funded by the **2016 DARPA Young Faculty Award**.

Total amount: **\$500,000** — Award number: D16AP00115

- 2019-21 *Bespoke: Learning bespoke interventions for optimizing performance in heterogeneous populations*
Co-Principal Investigator: This project is funded by the **DARPA DSO AI Explorations**.
 Total amount: **\$1,000,000**
 Collaborators: Kristina Lerman (PI, USC/ISI)
- 2017-19 *TILES: Tracking Individual performance with Sensors*
Co-Principal Investigator: This project is funded by **IARPA MOSAIC**
 Total amount: **\$6.8M** — Award number: 2017-17042800005
 Collaborators: Shri Narayanan (PI, USC); Kristina Lerman (Co-PI, USC/ISI)
- 2018-20 *LAG-MD: Deep Learning Agents and Game Theory for Military Decision-Making*
Co-Principal Investigator: This project is funded by the **DARPA DSO AI Explorations**.
 Total amount: **\$950,000** — Award number: HR00111990017
 Collaborators: James Blythe (PI, USC/ISI)
- 2017-20 *Digital deception: the cognitive and social mechanisms of the spread of fake news*
Co-Principal Investigator: This project is funded by **Air Force Office of Scientific Research**
 Total amount: **\$618,000** — Award number:
 Collaborators: Kristina Lerman (PI, USC/ISI)
- 2015-16 *DOISAC: Detecting Orchestrated Information and Synthetic Account Campaigns* (ONR)
Principal Investigator: This project is funded by the **U.S. Office of Naval Research** Total
 awarded amount: **\$150,000** — Award number: 1060-1920
- 2016-17 *SenseSaMo: Digital observatory for real-time monitoring of well-being in the city of Santa Monica*
Principal Investigator: This project is funded by City of Santa Monica
 Total awarded amount: **\$50,000** — Award number: 3166
- 2016-17 *Enhancing e-cigarette surveillance with Twitter data*
Co-Principal Investigator: This project is funded by the Tobacco Center of Regulatory Science
 Total awarded amount: **\$40,000**
 Collaborators: Jon-Patrick Allem (PI)
- 2017-19 *Summer School Series on Methods for Computational Social Sciences*
Co-Principal Investigator: This project is funded by the Volkswagen Foundation
 Total awarded amount: **\$260,000**
 Collaborators: Claudia Wagner (PI, GESIS Leibniz Institute for the Social Sciences, Germany),
 Michael Macy (Cornell University, USA), Nicola Perra (University of Greenwich, UK)

Participation in other projects as key personnel

- 2017-19 *SAGE: Synergistic Anticipation of Geopolitical Events*
Key Personnel: This project is funded by the IARPA HFC program.
 Collaborators: Aram Galstyan (PI, USC/ISI)
- 2016-19 *EFFEKT: Effectively Forecasting Evolving Cyber Threats* (IARPA)
Key Personnel: This project is funded by the IARPA CAUSE program.
 Collaborators: Kristina Lerman (PI), Craig Knoblock (co-PI)
- 2016-17 *SAFE: SIGINT-based Anticipation of Future Events* (IARPA)
Key Personnel: This project is funded by the IARPA Mercury program.
 Collaborators: Prem Natarajan (PI); Aram Galstyan (co-PI)
- 2015-16 *Situational awareness for social media* (DARPA)
Key Personnel: This project is funded by the DARPA SMISC program.
 Collaborators: Aram Galstyan (PI)
- 2012-15 *Detecting early signatures of persuasion in information cascades* (DARPA)
Key Personnel: This project is funded by the DARPA SMISC program.
 Collaborators: Alessandro Flammini (PI), Filippo Menczer (co-PI)

Education, Honors and Awards

Education

- 2009-11 **Ph.D.** in Mathematics (Machine Learning concentration), University of Messina, Italy.
Dissertation: *Mining and analysis of online social networks*.
Dissertation supervisor: Giacomo Fiumara (University of Messina).
Ph.D. advisors:
- Dr. Alessandro Proveti (Birbeck University of London, UK)
<https://scholar.google.com/citations?user=pw0BPBQAAAAJ>
 - Dr. Alberto Paccanaro (Royal Holloway University of London, UK)
<https://scholar.google.com/citations?user=uXTtbXUAAAAJ>
 - Dr. Robert Baumgartner (Vienna Technical University, Vienna, Austria)
- Dissertation defense: March 26, 2012 — *Doctor Europaeus / European Doctorate* honors
- 2006-08 **M.Sc.** in Computer Science (*summa cum laude*) — University of Messina, Italy.
Dissertation: *Design and Development of a Massively-Multiplayer Online Game*.
- 2003-06 **B.Sc.** in Computer Science (*summa cum laude*) — University of Messina, Italy.
Dissertation: *Optimization of the rail crossing of the Strait of Messina using RFID technology*.

Awards & Prizes

- 2019 **USC Viterbi Junior Research Award**.
- 2018 **DARPA Director’s Fellowship Award** (includes a **\$450,000** grant).
- 2018 *Best paper award* at **BESC 2018**.
- 2018 *Best reviewer award* for **The Web Conference (WWW’18)**.
- 2018 *Best paper award* at **IC2S2 2018**.
- 2016 **DARPA Young Faculty Award** (includes a **\$500,000** grant).
- 2016 **Complex Systems Society (CSS) Junior Scientific Award**.
- 2015 Selected to attend the 3rd *Heidelberg Laureate Forum (HLF)* in Germany, and awarded travel grants by *National Science Foundation* and *Oak Ridge Associated Universities (ORAU)*.
- 2014 Awarded seed funding by the *Indiana University* Office of the Vice Provost for Research for a project entitled *Social Attention in Social and Techno-Social Systems*.
- 2014 Awarded seed funding by the *Indiana University* Office of the Vice Provost for Research for a project titled *Creating a Computational Framework for Crime Characterization*.
- 2009-2011 Awarded *3-years Ph.D. fellowship* from Ministry of Education, Universities and Research (Italy).

Recognition

- 2019 Elected Research Fellow of Kobe University’s *Center for Computational Social Science*.
- 2018 Elected **IEEE Senior member** for significant contributions to Computer Engineering.
- 2016 Named **Inaugural Michael Keston Fellow** at the USC Information Sciences Institute.
- 2016 Elected **Senior Fellow** of UCLA’s Institute for Pure and Applied Mathematics (**IPAM**).
- 2016 Ranked 28th in the *Top 100 Big Data Experts to follow* list by Maptive
(<https://www.maptive.com/the-top-100-big-data-experts/>).
- 2015 **IBM Watson Analytics 2015 VIP Influencer in Big Data** award and a complimentary *VIP guest invitation* at the IBM Insight 2015 conference held in Las Vegas on Oct. 25-29, 2015.

Ph.D. Dissertation

- 2011 My Ph.D. Dissertation received the **Doctor Europaeus–European Doctorate** honorific.

- 2011 My Ph.D. Dissertation awarded at the “5th EuroSys Doctoral Workshop” organized by University of Cambridge.
- 2011 My Ph.D. Dissertation awarded at the “2011 Future perspectives of applied mathematics in Italy”, organized by The Italian Society of Applied and Industrial Mathematics (SIMAI).

Best paper awards, covers and highlights

- 2018 My paper “Discovering Latent Psychological Structures from Self-report Assessments of Hospital Workers” received the *best paper award* at **BESC 2018**.
- 2018 I received the *best reviewer award* for **The Web Conference (WWW’18)**.
- 2018 My paper titled “Evidence of Complex Contagion of Information in Social Media: An Experiment Using Twitter Bots” got the *best paper award* at **IC2S2 2018**.
- 2018 The paper “Analyzing the Digital Traces of Political Manipulation: The 2016 Russian Interference Twitter Campaign” has been selected among the **best papers** at *ASONAM 2018* and invited for a special issue on the journal *Social Network Analysis and Mining*.
- 2016 My paper “The Rise of Social Bots” was the **cover** of the July 2016 issue of Communications of the ACM.
- 2015 I was selected by the Scientific Committee of the **Heidelberg Laureate Forum Foundation (HLFF)** to participate to the 3rd Heidelberg Laureate Forum, taking place on August 23-28, 2015 in Heidelberg, Germany.
- 2015 My contribution “The Rise of Social Bots: Bot Detection in Social Media” won the **best poster award** at the 2015 Conference on Complex Systems (CCS 2015).
- 2014 The paper “Optimal Network Modularity for Information Diffusion”, published in the prestigious *Physical Review Letters*, was chosen as highlighted article (**Editors’ Suggestion**).
- 2014 The paper “Evolution of online user behavior during a social upheaval” won the **Best Paper Award** at the *ACM Web Science 2014 Conference* and was invited for a special issue on *The Journal of Web Science*.
- 2013 The paper “Clustering Memes in Social Media” has been selected among the **best papers** at *ASONAM 2013* and invited for a special issue on the journal *Social Network Analysis and Mining*, and eventually accepted and published.
- 2011 The paper “Generalized Louvain method for community detection in large networks” has been selected among the **best papers** at *ISDA 2011* conference, invited for a special issue on the *Journal of Computer and System Sciences*, and eventually accepted and published.

Professional Memberships

- IEEE Senior Member
- ACM Member
- AAAI Member

Service and Outreach

Summary: (i) I chaired 14 between conferences and workshops; (ii) I joined 56 program committees between conferences and workshops; (iii) I am founding editor of one journal, associate editor of four journals, and guest editor of two special issues; (iv) I reviewed for about 30 journals including top multidisciplinary and disciplinary journals; (v) I delivered over 30 talks since 2015.

Organization of conferences and workshops

- Conferences
 1. **PC Co-Chair** of the *3rd International Conference on Intelligent Information Technologies*.
<http://www.iciit.in>
Held in College of Engineering, Anna University Chennai, India, December 11-14, 2018.

2. **Chair** of the *2018 Computational Social Science Summer School*.
<http://summerschool.computationalsocialscience.eu/2018>
 Held at the USC Information Sciences Institute, Marina del Rey, CA (US), July–August 2018
 3. **General Chair** of *SocInfo'16: 8th International Social Informatics Conference*.
 Seattle, WA (USA), November 2016.
 4. **Sponsor Chair** and **Local co-Chair** of *ACM Web Science Conference (WebSci'14)*.
 Bloomington, IN (USA), June 2014.
 5. **Publicity Chair** of *SocInfo'14: 6th International Social Informatics Conference*.
 Barcelona, Spain, November 2014.
- Workshops:
 6. **Co-Chair**: “*ACUMEN: Data Science for Human Performance in Social Networks*” (ICDM'17).
 7. **Co-chair**: “*Computational Social Science: Social Contagion, Collective Behaviour, and Networks*” (CCS 2017). Cancun, Mexico, September 2017.
 8. **Co-chair**: “*Computational Social Science: Social Contagion, Collective Behaviour, and Networks*” (CCS 2016). Amsterdam, The Netherlands, September 2016.
 9. **Co-chair** of “*Computational Social Science: Social Contagion, Collective Behaviour, and Networks*” (ECCS 2015 workshop). Tampa, Arizona, September 2015.
 10. **Co-chair** of “*Connecting Online and Offline Life*” (COOL 2014: WWW 2014 workshop). Seoul, Korea, April 8, 2014.
 11. **Co-chair** of “*Computational Approaches to Social Modeling*” (WebSci 2014 workshop). Bloomington, IN (USA), June 23, 2014.
 12. **Co-chair** of “*Computational Social Science: Social Contagion, Collective Behaviour, and Networks*” (ECCS 2014 workshop). Lucca, Italy, September 2014.
 13. **Co-chair** of “*Criminal network analysis and mining*” (SocInfo 2014 workshop). Barcelona, Spain, November 2014.
 14. **Co-chair** of “*Collective Behaviors and Networks 2013*” (ECCS 2013 workshop). Barcelona, Spain, September 16-20, 2013.

Recent talks (2015-2019)

- “*AI & Social Media*”
 1. ACM Collective Intelligence conference [invited]. Pittsburgh, PA, USA. June 2019
 2. USC Polymathic Center, Los Angeles, CA, USA. April 2019.
 3. Complex networks: from socio-economic systems to biology and brain. Lipari, Italy. July'18
 4. USC Computing Forum: AI in life, Marina del Rey, CA, USA. May 2018
- “*Tracking Individual Performance with Sensors*”
 1. mHealth 2019: 2nd Mobile Health Conference, Los Angeles, CA, USA. April 2019.
- “*Humans, bots, and manipulation of social media*”.
 2. MIS2: Misinformation and Misbehavior on the Web [keynote]. WSDM'18 Los Angeles, Feb'18
 3. Media Exposure and Opinion Formation workshop [invited talk]. USC. Los Angeles, Nov 2017
 4. UCLA. Los Angeles, CA, USA. March 2017
 5. University College London (UCL), London, UK. Feb. 2017
 6. USC: Rusch Undergraduate Engineering Honors Colloquia. Los Angeles, CA, USA. Jan. 2017
 7. Stanford University: 2016 Digital Campaign [invited talk]. Stanford, CA, USA. Dec. 2016
 8. Chasm'16: Computational Approaches to Social Modeling [keynote]. Seattle, WA, Nov 2016

- “*Human performance dynamics in online games*”
 9. UCLA, Los Angeles, CA. May 2018
 10. National Cognitive Science Conference, San Diego, USA. Apr. 2018
 11. ICDM DAPS 2017 [keynote talk], New Orleans, LO, USA. Nov. 2017
 12. DARPA NGS2 Meeting, Washington, DC, USA. Oct. 2016
- “*Social Politics: Agenda Setting and Political Communication in Social Media*”.
 13. Social Informatics 2016, Seattle, WA, USA. Nov. 2016
- “*Predicting human behaviors in techno-social systems: fighting abuse and illicit activities*”.
 14. Kobe University [invited talk]. Kobe, Japan. Sept. 2016
 15. USC AI for Social Good center [invited talk]. Los Angeles, CA (US). Sept. 2016
 16. HRL Laboratories [invited talk]. Malibu, CA (US). July 2016
 17. Northwestern University [invited talk]. Evanston, IL (US). Feb. 2016
 18. University of California, Los Angeles [invited talk]. Los Angeles, Jan. 2016
 19. University of Southern California, IPAM [invited talk]. Los Angeles, CA (US). Jan. 2016
 20. USC’s Information Sciences Institute. Marina del Rey, CA. Apr’15 (<https://bit.ly/2KXdDRf>)
 21. Syracuse University [invited talk]. Syracuse, NY (US). Apr. 2015
 22. Northeastern University [invited talk]. Boston, MT (US). Mar. 2015
 23. New Jersey Institute of Technology [invited talk]. Newark, NJ (US). Mar. 2015
 24. DARPA ADAMS/SMISC Meeting. Arlington, VA (US), Mar. 2015
- “*On predictability of rare events leveraging social media: a machine learning perspective*”
 25. ACM COSN’15: ACM Conference on Online Social Networks. Stanford University, Nov. 2015
 26. CCS’15: Conference on Complex Systems [invited talk]. Tempe, AZ (US). Sept. 2015
- “*Measuring emotional contagion in online social media*”
 27. CCS’15: Conference on Complex Systems [invited talk]. Tempe, AZ (US). Sept. 2015
- “*The rise of social bots: fighting deception and misinformation on social media*”.
 28. CCS’15: Conference on Complex Systems [invited talk]. Tempe, AZ (US). Sept. 2015
 29. Indiana University [invited talk]: Network Science talks. Bloomington, IN (US). Jan. 2015

Affiliations to Research Centers

- USC Behavioral Informatics Center (BIC) (<https://sites.usc.edu/bic/>)
- USC Center for Artificial Intelligence in Society (<https://www.cais.usc.edu>)

Editorial Boards

- 2017-2019 Founding Editor of Techno-Social Smart Systems (<https://bit.ly/2IDxRxC>)
- 2017- Associate Editor of EPJ Data Science (<https://epjdatascience.springeropen.com/>)
- 2018- Academic Editor of PLOS One (Complex Networks, <https://journals.plos.org/plosone/>)
- 2019- Editorial Board member of *Online Social Networks and Media* (<https://bit.ly/2JSnaFm>)
- 2017- Editorial Board member of *Data Science* (<https://www.iospress.nl/journal/data-science/>)
- 2016- Editorial Board member of *Future Internet* (MDPI - <https://bit.ly/2ID0fji>)
- Editor: “Computational Social Sciences” special issue on *Future Internet* (<https://bit.ly/2GC4kSy>)
 - Editor: *EPJ Data Science*’s series “Collective Behaviors and Networks” (<https://bit.ly/2W01v1X>)

Referee

- **Journals** — ACM Transactions on: (i) Information Systems; (ii) Knowledge Discovery from Data; (iii) Internet Technology; (iv) Intelligent Systems and Technology; Artificial Intelligence Journal; Communications of the ACM; Complex Adaptive Systems Modeling; Computer Communications; Data Mining and Knowledge Discovery; EPJ Data Science; Entropy; Expert Systems With Applications; IEEE Transactions on: (i) Information Forensics and Security; (ii) Cybernetics; (iii) Systems, Man and Cybernetics: Systems; (iv) Information Forensics & Security. Information Sciences; Journal of the American Society for Information Science and Technology; Journal of Computer-Mediated Communication; Journal of Medical Internet Research; Knowledge-based systems; Nature Scientific Reports; Network Science; Pervasive and Mobile Computing; PLoS ONE; Physica A; Social Network Analysis and Mining; The Computer Journal; World Wide Web Journal.
- **Conference Program Committee** — **KDD 2019 (Research Track)**; **WebSci 2019** (Senior PC); **AAAI 2019**; **ICWSM 2018** (Senior PC); **NetSci 2019**; **ASONAM 2019**; **SMSociety 2019**; **WWW 2018** (Social Network track & Web/Society track); **HyperText 2018** (Senior PC); **WebSci 2018** (Senior PC); **ICWSM 2017** (Senior PC); **IC2S2 2018**; **ICCS 2018**; **MLG 2018**; **WebSci 2017** (Senior PC); **NetSci 2017** (Senior PC): International School and Conference on Network Science; **WWW 2017** (Social Network track & Web Science track); **IC²S² 2017**; **CCS 2017**: Conference on Complex Systems; **IJCAI 16**: 25th International Joint Conference on Artificial Intelligence; **ACM WebSci 16**: 10th Web Science Conference; **ICWSM 2016** (Senior PC); **WWW 2016** (Social Network track & Web Science track); **IC²S² 2016**; **ICWSM 2015**; **WWW 2015** (Social Network track & Web Science track); **ASONAM 2015**: Advances in Social Network Analysis and Mining; **IC²S² 2015**: International Conference on Computational Social Science; **SocInfo 2015**; **SocialCom 2015**; **SocInfo 2014**: 6th International Conference on Social Informatics; **ICWSM 2014**: 8th International AAAI Conference on Weblogs and Social Media; **WWW 2014**: 23rd International World Wide Web Conference (Social Network track & Web Science track); **SocialCom 2014**: 7th International Conference on Social Computing; **SITIS 2014**: 10th International Conference on Signal-Image Technology & Internet-Based Systems; **WEB 2014**: Conference on Building and Exploring Web Based Environments; **CIKM 2011**: Conference on Information and Knowledge Management; **ISDA 2011**: International Conference on Intelligent Systems Design and Applications.
- **Grant panels** — **(2012)** National Fund for Scientific and Technological Development: Chilean Government; **(2013)** Federal Department of Economic Affairs, Education and Research: (SERI/COST) Swiss Confederation; **(2014)** Austrian Science Fund: FWF; **(2018)** US Army Research Office.

Service in other capacities

- A.A. 2018-2019: Teaching Faculty Hiring Committee
- Jan 2018-present: USC Information Sciences Institute's **Infrastructure Oversight Committee**

Open-source tools & data

- I lead the design and development of *Botometer* (a.k.a. *Bot or Not*) —the Twitter social bot detection framework openly accessible at: <http://botometer.org>
- I developed and released *Conclude: a large scale network community detection framework*, and the *KPath: Random walk network weighting fast algorithm* (code at: <https://bit.ly/2KZ27VE>).
- I keep a repository of datasets I collected for research purpose (online platform and games , etc.), that I openly share with the community (data at: <https://bit.ly/2IB8IUd>).

Teaching & Mentoring

Teaching as Primary Instructor

2018-19 **USC CSCI-599 Data Science for Social Systems** (<https://bit.ly/2H0pT4A>)
Course evaluation (N=75): **3.42/4.0 Instructional Practices - 3.47/4.0 Course Design**

2014-15 **Indiana University** INFO-I400/590: **Mining the Social Web** — Primary Instructor
Course evaluation (N=14): **4.9/5.0 Outstanding Instructor - 4.1/5.0 Outstanding Course**

Guest Lecturer

2015-16 **USC CSCI-599: Special Topics: Social Networks** — Guest Lecturer
INF-549: **Introduction to Computational Thinking and Data Science** — Guest Lecturer

2014-15 INFO-I400/590: **Today's Privacy Challenges** — Guest Lecturer
INFO-I400/590: **Large-scale Social Phenomena** — Guest Lecturer

2013-14 **IU INFO-I601: Introduction to Complex Systems** — Guest Lecturer
INFO-I690: **Mathematical Methods for Complex Systems** — 15 Guest Lectures

2010-11 **Advanced Programming Languages, Algorithms and Data Structures, Programming Languages, Computer Architectures, Operating Systems** (University of Messina, Italy) — Lab Instructor (4 semesters)

Committees: PhD, Thesis Proposals, & Quals

2019 *Palash Goyal* (Advisor: EF; PhD Defense; Committee Chair); *Shahrzad Gholami* (Advisor: Milind Tambe, PhD Defense); *Sivaram Ramanathan* (Advisor: Jelena Mirkovic, Quals); *Ericsson Marin* (Arizona State University; Advisor: Paulo Shakarian, Quals); *Han Ching* (Advisor: Milind Tambe, Quals); *Ekraam Sabir* (Advisor: Prem Natarajan; Quals); *Rajat Tandon* (Advisor: Jelena Mirkovic; Quals). **MSc Thesis Committee:** Ankith Mohan (Advisor: Aiichiro Nakano); Olutobi Akomolede (Advisor: Jeremy Abramson).

2018 *Aida Rahmattalabi* (Advisor: Milind Tambe; Quals); *Shahrzad Gholami* (Advisor: Milind Tambe; Quals).

Mentoring Activities & Support

2018-19 **University of Southern California:**

Postdocs: *Homa Hosseinmardi, Goran Muric, Anna Sapienza, Zhenxiang Gao*

PhD: Adam Badawy (Political Sciences), Ashok Deb (CS), Palash Goyal (CS), Di (Diana) Huang, Hsien-Te Kao (CS), Luca Luceri (Visiting PhD), Akira Matsui (CS), Shen Yan (CS), Yilei Zeng (CS)

MSc: Mohammad Zaiyan Alam, Deepali Bhola, Divya Choudhary, Ankita Goswami, Samar Haider, Dhruv Mathew, Vikram Mudaliar, Huy Tran Nghiem, Divya Suri,

Undergrads: Zhixu Li, Xinyi Lin, Xinyi Peng, Raj Vaza, Qufei (Lina) Wang, Yiyun (Yvonne) Zhu, Tong (Sally) Zuo

Summer '19 : Boli Fang (PhD from Indiana University), Leonardo Nizzoli (PhD from IIT & University of Pisa), Hanyu Chwe (PhD from Northeastern University), Desheng Hu (PhD from Northeastern University), Mark Heimann (PhD from University of Michigan), Mariam Nouh (PhD from Oxford University), Hao Peng (PhD from University of Michigan), Mengfan (Miley) Yao (PhD from SUNY Albany)

2017-18 **University of Southern California:** [Postdocs: *Homa Hosseinmardi, Goran Muric, Anna Sapienza*] [PhD: *Adam Badawy* (Political Sciences), *Ashok Deb* (CS), *Palash Goyal* (CS), *Hsien-Te Kao* (CS), *Akira Matsui* (CS), *Shen Yan* (CS), *Yilei Zeng* (CS)] [MSc: *Di (Diana) Huang*] [Undergrads: *Zhixu Li, Xinyi Peng, Raj Vaza, Qufei (Lina) Wang, Yiyun (Yvonne) Zhu, Tong (Sally) Zuo*]

2018 **USC/ISI summer interns:** *Aseel Addawood* (PhD student from University of Illinois at Urbana-Champaign); *Ritam Dutt* (IIT Kharagpur); *Mert Ozer* (PhD student from Arizona State University); *Zhenyu Qin* (Tsinghua University); *Zhao Wang* (PhD student from Illinois Institute of Technology)

2017 **USC/ISI summer interns:** *Amir Yazdavar* (PhD student from Write State University); *Sindhu Ernala* (PhD student from Georgia Tech University); *Sneha Kudugunta* (undergrad from IIT Hyderabad); *Hao Peng* (PhD student from Indiana University); *Iacopo Pozzana* (PhD student from Birbeck University of London)

2016-17 **University of Southern California:** *Laura Alessandretti* (USC/ISI summer fellow PhD student), *Adam Badawy* (USC Dornsife PhD student), *Alessandro Bessi* (Postdoc), *Prathmesh Gat* (USC Viterbi MSc student), *Chiranth Gopal* (*Viterbi-India program* undergrad student), *Palash Goyal* (USC Viterbi CS PhD Student), *Margaret Martin* (USC Viterbi CS MSc student), *Simrat Singh* (USC Viterbi CS MSc student), *Anna Sapienza* (Postdoc), *Archit Srivastava* (USC Viterbi CS MSc student), *Sree Uppu* (USC Viterbi CS MSc student)

2015-16 **Information Sciences Institute at USC:** I co-mentored three graduate students.

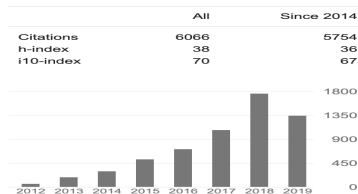
spring '15 **Achievements of Women in STIM:** mentor and panel judge.

2012-14 **CNetS Lab at Indiana University:** I co-mentored three graduate students in 2012, seven in 2013, and eight in 2014, for a total of *fifteen different graduate students* mentored at IU during my postdoctoral activity. I have coauthored papers with all of them.

summer '13 **Women SROC (Summer Research Opportunities in Computing) at Indiana University:** I supervised two STEM Informatics BSc summer students at Indiana University.

2010-12 I co-supervised 4 BSc and 1 MSc students in Computer Science at the University of Messina, Italy.

Publications



Summary: 117 peer-reviewed publications (56 journal articles, 38 conference papers, 14 workshop papers, 9 book chapters).

Impact Metrics: >6,000 citations; h-index=38 as of July 2019.

Google Scholar: <https://bit.ly/2Vi9Xh1>

◇ identifies highly cited (> 100 citations) or top journals (CACM, PNAS).

(I) Peer-reviewed Journal Publications [Impact Factors in brackets]

- 2019
1. K-C Yang, O Varol, CA Davis, **E Ferrara**, A Flammini, F Menczer.
Arming the public with artificial intelligence to counter social bots.
Human Behavior & Emerging Technologies, e115, 2019. (<https://doi.org/10.1002/hbe2.115>)
 - ◇ 2. **E Ferrara**.
The History of Digital Spam.
Communications of the ACM. August 2019, 62:8, 2019 [3.301] (<https://doi.org/10.1145/3299768>)
 3. A Badawy, K Lerman, **E Ferrara**.
Characterizing the 2016 Russian IRA Influence Campaign.
Social Network Analysis and Mining 9:31., 2019 (<https://doi.org/10.1007/s13278-019-0578-6>)
 4. B Booth, K Mundnich, T Feng, A Nadarajan, T Falk, **E Ferrara**, S Narayanan.
Selecting and Managing Sensors for Behavioral Research in Non-controlled Settings.
Journal of Medical Internet Research . (<https://preprints.jmir.org/preprint/12832>)
 5. A Sapienza, P Goyal, **E Ferrara**.
Deep Neural Networks for Optimal Team Composition.
Frontiers in Big Data, 2:14, 2019. (<https://doi.org/10.3389/fdata.2019.00014>)
 6. Y Zeng, A Sapienza, **E Ferrara**.
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Machine Learning for Bot Detection (Unhacking Democracy Podcast)
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This new Twitter account hunts for bots that push political opinions (Quartz)
Watch: Five Ways the Internet Is Destroying Society (IEEE Electronics 360)
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