Alessia Galdeman

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EDUCATION

UNIVERSITY OF MILAN
MS in Computer Science
April 2021 | 110 cum laude
BS in Computer Science for Digital Communication
December 2018 | 102/110

UNIVERSITY OF CHICAGO
Student Summer Research Fellowship Program
July-August 2019| Chicago, IL

LINKS

Twitter: @AlessiaGaldeman
LinkedIn: **Alessia Galdeman**
Scholar: **Alessia Galdeman**

SKILLS

INTERESTS
Data and Network Analysis
Big data and complex systems
Information Management
Computational Social Science
Data Visualization
Text Mining
Machine learning

HARD SKILLS
Data and network analysis:
NetworkX • Networkit • Igraph • Gephi • Mongo • statsmodel
Matplotlib • Keras • Tensorflow
Scikit-learn • Presentation tools
Spreadsheets tools
Database:
PostgreSQL • MySQL • MongoDB
Framework for web applications:
Bootstrap • Phonegap

PROGRAMMING
Advanced in:
Python • LateX
Medium level in:
HTML/CSS/Javascript • XML • Java • PHP • R

SOFT SKILLS
Time Management
Problem Solving
Adaptability
Leadership

CURRENT POSITION

PHD STUDENT | University of Milan
1 October 2021 - present | CONNETS Lab - Computer Science Department
Supervisors: Prof. Sabrina Gaito, Dr. Matteo Zignani
I'm currently a 3rd-year Phd Student at CONNETS Lab, where I supervise the thesis work of both bachelor and master students in the field of complex networks. I also organize and lead weekly meetings on these topics. I am an assistant in courses on network science.

EXPERIENCE

RESEARCH FELLOW | University of Milan
June 2021 - October 2021 | Computer Science Department
Research grant winner for project **VASARI**

PHD VISITOR | IT University of Copenhagen
April 2023 - July 2023 | NERDS Lab - Computer Science Department
Supervisor: Prof. Luca Maria Aiello
I worked on the COllective COordination through ONline Social media (**COCOONS**) project, supervised by Prof. Luca Maria Aiello at NERDS Lab.

TEACHING ASSISTANT | University of Milan
February 2023 - June 2024 | Computer Science Department
Lab for Social Media Mining course of the bachelor degree in Computer Science for Digital Communication
September 2022 - December 2023 | Economics, Management, and Quantitative Methods Department
Lab for Social Network Analysis course of the master degree in Data Science and Economics

TUTOR | University of Milan
May 2019 - February 2021 | Computer Science Department
Tutors of a Basic Computer Science course for several bachelor degrees.

TALKS AND INVITED TALKS

2021-2023	**Talk** at the IEEE International Conference on Data Science and Advanced Analytics (DSAA 2021, 2022, 2023)
2022,2023	**Talk** at the International Conference on Complex Networks and their Application (2022, 2023)
2022, 2024	**Talk** at International School and Conference on Network Science (NetSciX 2022, 2024)
May 2022	**Talk** at Complex Networks: Theory, Methods, and Applications School
Oct 2022	**Talks** at Conference on Complex System (CCS)
Nov 2023	**Invited Tutorial** at the 16th International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2023)
Jan 2024	**Invited Tutorial** on graph machine learning at University of Pisa

AWARDS

Vasari Grant Winner | *2021*
Research grant winner for Italian national project VASARI

Phd Selection | *2021*
1st out of 40 candidates for Computer Science PhD selection

Indaco Grant Winner | *2022*
Grant of 2000 computing hours on Indaco HPC platform

Best Lightning Presentation | *2022*
Best Lightning Presentation at the 11th International Conference on Complex Networks and their Applications

Runner-up Bertalanffy Doctoral Student Award | *2023*
Selected as one of the three nominees for the Bertalanffy Doctoral Student Award at the French Regional Conference on Complex Systems 2023

Runner-up Bertalanffy Data Visualization Competition | *2023*
Selected as one of the runner-ups for the Data Visualization competition of the BUILD LAB at ITU Copenhagen

COLLABORATIONS

NERDS LAB | *IT University of Copenhagen*
Collaboration started in April 2023, working on the COllective COordination through ONline Social media (**COCOONS**) project

Pisa-DL (Pisa Distributed Ledger Technology) LAB| *University of Pisa*
Collaboration started in February 2022, working on blockchain-based networks

AI-DS (Artificial Intelligence and Data Science| *University of Calabria*
Collaboration started in May 2022, working on blockchain-based networks

SAND (Security, Algorithms, Networking and Data) LAB| *University of Chicago*
Collaboration started in July 2019, worked on a machine learning project

REVIEWS

EPJ Data Science, Machine Learning journal, Multimedia Tools and Applications journal, Computer Science Review Journal, Applied Network Science,IEEE Transactions on Artificial Intelligence Journal, WebSci, ICWSM, NetSci, BRAIN at PerCom, LIMBo at ECML-PKDD

SELECTED PUBLICATIONS

2021

A Multilayer Network Perspective on Customer Segmentation Through Cashless Payment Data
Alessia Galdeman, Cheick T. Ba, Matteo Zignani, Sabrina Gaito
Accepted at: 2021 IEEE International Conference on Data Science and Advanced Analytics (DSAA)

City consumption profile: a city perspective on the spending behavior of citizens.
Alessia Galdeman, Cheick T. Ba, Matteo Zignani, Christian Quadri, Sabrina Gaito
Published in: Applied Network Science 6.1 (2021): 1-20.

2022

Disentangling the Growth of Blockchain-based Networks by Graph Evolution Rule Mining
Alessia Galdeman, Matteo Zignani, Sabrina Gaito
Accepted at: 2022 IEEE International Conference on Data Science and Advanced Analytics (DSAA)

Temporal analysis of cooperative behaviour in a blockchain for humanitarian aid during the COVID- 19 pandemic
Cheick T. Ba, Alessia Galdeman, Matteo Zignani, Sabrina Gaito
Accepted at: The 2022 ACM International Conference on Information Technology for Social Good (GoodIT)

Web3 social platforms: modeling, mining and evolution
Cheick T. Ba, Alessia Galdeman, Manuel Dileo, Christian Quadri, Matteo Zignani, and Sabrina Gaito
Accepted at: 1ST Italian Conference on Big Data and Data Science (ItaData)

2023

User migration across Web3 online social networks: behaviors and influence of hubs
Alessia Galdeman, Matteo Zignani, and Sabrina Gaito
Accepted at: IEEE International Conference on Communications (ICC)

Unfolding temporal networks through statistically significant graph evolution rules
Alessia Galdeman, Matteo Zignani, and Sabrina Gaito
Accepted at: 2023 IEEE International Conference on Data Science and Advanced Analytics (DSAA)

User migration prediction in blockchain socioeconomic networks using graph neural networks
Cheick T. Ba, Alessia Galdeman, Manuel Dileo, Matteo Zignani, and Sabrina Gaito
Accepted at: The 2023 ACM International Conference on Information Technology for Social Good (GoodIT)

2024

Analyzing user migration in blockchain online social networks through network structure and discussion topics of communities on multilayer networks
Cheick T. Ba, Manuel Dileo, Alessia Galdeman, Matteo Zignani, and Sabrina Gaito
Published in: Distributed Ledger Technologies: Research and Practice

Exploring temporal triadic closure patterns in online social networks
Alessia Galdeman, Cheick T. Ba, Matteo Zignani, and Sabrina Gaito
Submitted to Journal

Modeling and Analyzing Financial Interactions in NFT Markets through Multilayer Networks
Alessia Galdeman, Lucio La Cava, Matteo Zignani, Andrea Tagarelli, and Sabrina Gaito
Submitted to Journal

Graph evolution rules meet communities: assessing global and local patterns in the evolution of dynamic networks
Alessia Galdeman, Matteo Zignani, Sabrina Gaito
Submitted to Journal