

PERSONAL INFORMATION

Matteo Francia

 Cesena (FC), Italy

 -

 [m.francia\[at\]unibo.it](mailto:m.francia[at]unibo.it)

 <https://www.unibo.it/sitoweb/m.francia/publications>

 Skype [m.francia\[at\]unibo.it](https://www.skype.com/people/m.francia[at]unibo.it)

Gender Male | Date of birth 1992 | Nationality Italian

EDUCATION

Nov 3, 2019 - Feb 29, 2020

Visiting Ph.D. student

Affiliation: Data Science Research Group, ITEE, University of Queensland, Australia

Supervisor: Prof. Xiaofang Zhou

Topic: "Privacy on trajectory data"

Description: research on existing privacy models for spatio-temporal data, and on sensitive information conveyed by individual locations

Nov 1, 2017 - Now

Ph.D. student in *Computer Science and Engineering*

Affiliation: Business Intelligence Group, DISI, University of Bologna, Italy

Supervisors: Prof. Matteo Golfarelli, Prof. Stefano Rizzi

Topic: "Analytics on unconventional data"

Description: Research on big data and business intelligence, with a particular focus on (i) spatiotemporal data, and (ii) recommendation and interpretation of OLAP session in hand-free scenarios (e.g., augmented and conversational business intelligence)

May 1, 2017 - Oct 31, 2017

Research fellow

Affiliation: Business Intelligence Group, DISI, University of Bologna, Italy

Supervisor: Prof. Matteo Golfarelli

Topic: "Modeling social behaviors from trajectory data"

Oct 2014 - Mar 2017

Master's degree in *Computer Science and Engineering*

Affiliation: DISI, University of Bologna, Italy

110L/110 - *Graduated cum laude*

Thesis: "A Foundational Library for Aggregate Programming"

Oct 2, 2016 - Dec 2, 2016

Visiting student

Affiliation: University Of Iowa, IA, USA

Topic: "Advancements in the aggregate programming field"

Supervisors: Dr. Jacob Beal, Prof. Mirko Viroli

Sep 16, 2015 - Jul 06, 2016

Erasmus+ student in *Naturwissenschaftliche Informatik*

Affiliation: Universität Bielefeld, Bielefeld, Germany

Sep 2011 - Oct 2014

Bachelor's degree in *Electron., Inform. and Telecommun. Eng.*

Affiliation: DISI, University of Bologna, Italy

110L/110 - *Graduated cum laude*

Thesis: "Apprendimento hebbiano in robotica"

2006 - 2011

High-school diploma in *Informatica Abacus*

Affiliation: I.T.T.S. "Blaise Pascal", Cesena, Italy

100L/100 - *Graduated cum laude*

AWARDS

Jun 28, 2018 "Gianni Bassi" Rotary Award, Best Graduate (School of Eng.&Archit.)

May 20, 2017 "Guido Paolucci" 27th Rotary Award, Best Graduate

CERTIFICATIONS

Apr 2019 ECDL Standard, Full Standard, IT Security

EXPERIENCE

- Sep 2019; May 2018 - Jul 2018 **Scientific advisor "Analytics on trajectory data"**
Collaboration on Trajectory Mining applications
- May 2019 - Jun 2019 **Lecturer "Relational databases"**
Assoform, RN, Italy
IFTS "Big data: new competences for new professions"
- Feb 2019 **Lecturer "Big Data and Analytics"**
FORMart, FC, Italy
IFTS "Industry 4.0 & IT reference technologies"
- Feb-Mar 2019; Feb-Mar, 2018 **Laboratory lecturer "Information Systems"**
Bologna Business School, BO, Italy
Master in Finance, Control, Auditing
- Sep 2017 **Lecturer "Database and data management"**
Futura srl, BO, Italy
FSE "Tecnico specializzato in programmazione di applicazioni HMI/SCADA"

RESEARCH ACTIVITY

Conference papers

Journal papers

Research projects

Agro.Big.Data.Science (2019-2020): enabling precision farming services through the spatial integration of heterogeneous sources (e.g., satellite images, vector data) in a big data platform

Sub-reviewer

DAWAK (2020), CIKM (2018)

Advisor

- Master thesis 2020: Luca Semprini (TBA), Federico Naldini (Clustering di traiettorie in ambito big data), Rrok Gjinaj (Progettazione di un sistema di Conversational BI);
2019: Sara Sintoni (Progettazione di un framework per conversational OLAP), Federico Vitali (Map-Matching su piattaforma BigData), Mattia Oriani (Clustering di traiettorie su piattaforma big data), Nicola Santolini (Dati social per la deanonimizzazione di tracce GPS);
2018: Luca Campana (Analisi di dati di traiettoria su piattaforma Big Data)
- Bachelor thesis 2018: Chiara Forresi (Piattaforma per analisi dati di navigazione);
2017: Nicola Narducci (Mining di pattern rilevati da dati di traiettoria)

OTHER

Exhibition "Magic Boxes" (Mar 14-15, 2014)

MAMbo - Museum Of Modern Art Bologna, Bologna, Italy
"Smart" boxes (Raspberry Pis and Android tablets) capable of self-organization to create different compositions and effects. <http://www-db.disi.unibo.it/MAMbo/mambo/i6/en/>
Supervisor: Prof. Alessandro Ricci

Open source contributions

Business Intelligence Group (UniBO) repository <https://github.com/big-unibo>
Protelis-Lang library for aggregate computing <http://github.com/Protelis/Protelis>
Alchemist simulator enhancements <http://github.com/AlchemistSimulator/Alchemist>
Contributor to ArchWiki and Wikipedia

TECHNICAL SKILLS

Big data frameworks	Hadoop, MapReduce, Spark
Geographic information systems	Oracle Spatial, PostGIS, GeoSpark
Programming languages	Java, Scala, Python, C#, Haskell, Prolog, JavaScript, C
DBMS	MySQL, Postgres, PostGIS, Oracle, Access, MongoDB
Development techniques	Versioning: Git; Build systems: Gradle; CI: TravisCI

LANGUAGE

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B2	B2
German	B1	b1	A2	A2	A2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Jul, 2015 IELTS - European level: C1