



# DILETTA GOGLIA

## MSc STUDENT IN ARTIFICIAL INTELLIGENCE

### PROFILE

I am 24 years old, I am an Italian national and I am currently living in Pisa. I got a Bachelor Degree in A.Y. 2018 in Digital Humanities (Informatica Umanistica) at University of Pisa and now I am a student of the Master Degree in Artificial Intelligence, at the Department of Computer Science of the same university.

I have working experience as teaching assistant, as Web Designer and Developer, Social Media Manager and Content Creator.

During my studies I gained deep expertise in Machine Learning, Deep Learning and Neural Network models. I also became really interested in the ethic field of Artificial Intelligence and in its complex social implications.

In my private life I am an activist for some relevant social ... I am Buddhist and bodybuilding competitor. I am also a huge reader! I love books about roboethic, religions and personal development.

### HARD SKILLS

I am a Full Stack Developer expert in:

#### • Machine Learning, Deep Learning, Neural Networks

- Bayesian learning
- Graphical and generative models (HMM, MRF)
- Dynamic Bayesian networks
- Deep learning techniques (CNN, Autoencoders, DBN, etc.)
- Deep learning for machine vision and signal processing
- Advanced neural networks (recurrent, recursive, ...) for learning and forecasting
- Reinforcement learning
- Signal processing and time-series analysis
- Image processing, filters and visual feature detectors
- ML and DL libraries & tools: Keras, Tensorflow, MatLab

#### • Web Development & Desing

- HTML, CSS, XML, XHTML, XSL-T, RelaxNG, JavaScript
- Client-side lanuages: JavaScript, TypeScript
- Server-side languages: Python, PHP
- Others: Flask, Google API, AJAX call, jQuery, JSON
- MySQL for relational DBMS
- Graphic design: Adobe Photoshop, Illustrator, InDesign

#### • Semantic Web and Linked Open Data

- RDF, RSFS, OWL, SPARQL

#### • Communication

- CMS management (Wordpress)
- Social Network Management
- Professional Writing: Ebook, scientific papers

### PUBLICATIONS

- D. Goglia, [Amplifying bias, automating racism. Ethically framing the issue of algorithmic discrimination](#), July 2020, University of Pisa
- D. Goglia, [Linked Open Data per il Cultural Heritage italiano: conversione e pubblicazione nel Semantic Web del Fondo antico del Comune di Novi Ligure](#), May 2019, University of Pisa

### CONTACTS

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### LANGUAGES

Italian (native)

English (CEFR level B2 First)

French (CEFR level A1)

### EXAMS GRADES




Master Degree

- Social and Ethical Issues in IT: **30/30**
- Intelligent Systems for Pattern Recognition: **30 cum laude**
- Semantic Web: **28/30**









Bachelor Degree

- Final Thesis: **110/110**
- Digital Libraries: **30/30**
- Philosophy of science: **30 cum laude**
- Graphic design: **30/30**
- Databases and Web design: **29/30**
- Text encoding: **28/30**
- Ethics of communication: **30/30**
- Web design and development: **30 cum laude**

## EDUCATION

In progress... Enrollment: AY. 2019/20	<b>MSc Student in <a href="#">Artificial Intelligence</a></b> Master programme in Computer Science  University of Pisa
Enrollment: AY. 2015/16 Graduation: AY. 2017/18	<b>Bachelor Degree in <a href="#">Digital Humanities</a></b>  University of Pisa Final grade: 110/110
2011 - 2015	<b>High school diploma</b>  Liceo scientifico G. Galilei, Civitavecchia Final grade: 95 /100

## WORKING EXPERIENCE

SEP-DEC 2020	<b>Teaching assistant</b>  University of Pisa Teaching Javascript & Typescript at the course of Laboratory I, to first year students of the Bachelor Degree in Computer Science
OCT 2020	<b><a href="#">Social Media Editor</a></b>  <i>Internet Festival 2020 edition</i> event, Pisa Member of the content creators staff for the event; real time promotion of the activities through web and social.
MAR 2020	<b>Technical support to Informatic Section staff of Medical School</b>  Santa Chiara Hospital, Pisa <i>See below "Won Rankings" section.</i> Support the operators at the IT centre of Medicine. Interrupted due to COVID-19.
OCT 2019	<b><a href="#">Social Media Editor</a></b>  <i>"Internet Festival 2019 edition"</i> event, Pisa Member of the content creators staff for the event; real time promotion of the activities through web and social.
NOV 2018 – SEP 2019	<b>Technical assistance to University staff</b>  University of Pisa <i>See below "Won Rankings" section.</i> Technical-administrative and teaching staff assistance ("Teledidattica digitale evoluta" project) and support for post-production of multimedia content
JUN 2018	<b>Web designer</b>  ICT agency <i>Memphremagog</i> , Lucca. Javascript programming, user interface improvements, graphic intervention on the company business website.
MAY - JUN 2018	<b>Web Designer, Promoter, Social Media Manager</b>  <i>"Vintage"</i> , Pisa (food & restaurant services sector) Website development and social network pages management for activity promoting.
MAR - MAY 2018	<b>Digital publishing – internship</b>  University of Pisa, "Laboratorio di Cultura Digitale" (curricular internship) Development and writing of an interacting ebook in english to promote an activity for the project " <a href="#">A Digital Journey in Europe, Erasmus+</a> ". Main aim: ICT integration in schools, and best practice sharing between students about digital learning.

## HOBBY AND ACTIVITIES



Coming soon...	<b><a href="#">Labodif</a> course:</b> Istituto di ricerca e formazione nello studio delle differenze di genere
2020	<b>Member of <a href="#">Associazione Italiana per l'Intelligenza Artificiale (AIXIA)</a>:</b> Istituto di ricerca e formazione nello studio delle differenze di genere
2020	<b>Supporter of <a href="#">Algorithmic Justice League (AJL)</a> movement</b>
2018-20	<b>Supporter of <a href="#">Fourth-Wave Feminist</a> movement</b>
2020	<b>Activist for <a href="#">SenzAtomica</a> :</b> "trasformare lo spirito umano per un mondo libero da armi nucleari".
2019	<b>Member of <a href="#">Soka Gakkai International (SGI)</a> :</b> Istituto Buddista Italiano per la pace, la cultura e l'educazione
2017-18	<b>Training seminars on equal rights and opportunities: "categorie, diritti, discriminazioni",</b> by CIRQUE (Centro Interuniversitario di Ricerca Queer).

# PORTFOLIO

## PROJECTS FOR UNIVERSITY OF PISA

- 2020 [Gated Recurrent Neural Network for timeseries prediction](#)  
Long-Short Term Memory (LSTM) to predict energy consumption from multivariate timeseries.
- 2020 [Hidden Markov Model for regime detection](#)  
Python analysis of timeseries to cluster ranges of consumption, using Hidden Markov Models with Gaussian emissions.
- 2020 [Image processing with SIFT algorithm](#)  
Python analysis on images using SIFT algorithm.
- 2020 [OWL Ontology in Turtle Notation](#)  
Semantic modelling project: building an ontology with languages recommended by W3C for Semantic Web
- 2020 [IoT application](#)  
"SmartBin, a Smart Solution for Garbage Management" for improvement on garbage management system: an intelligent bin that monitors itself.
- **Devices:** Arduino Uno + Weight sensor HX711 + Load cell + RFID Reader MC522 + Ultrasonic sensor HC-SR04 + WiFi Module ESP8266 + Servomotor + RGB Led
  - **Server:** Python Flask
  - **Database:** MySQL
  - **Web Interface:** Chart.js, AJAX call, Google Maps API
- 2020 ["The AI \(in\)justice league"](#)  
A report on Algorithmic Bias: why it is ethically problematic and how to handle it.  
[Link to the event talks](#)
- 2020 ["Embodied intelligence: a review"](#)  
The question of embodiment in behaviour-based robots.
- 2018 [Web app](#)  
Statistic and descriptive analysis of medical data as result of a Data Journalism investigation about supplement consumption in Italy.  
Data are extract, cleaned up and organized in CSV tables, managed through a database SQL. Query API are in PHP.  
The implemented software receives data through AJAX and return them in Json format to a script that processes them and show them in a client-readable format (charts displayed in a user interface).
- 2017 [Natural Language Processing analysis](#)  
Human-language features extraction from corpora and statistic analysis with NLTK.
- 2017 [Text Encoding](#)  
Digital encoding of some extract of the book "*La condizione postmediale*", using standards XML TEI P5, XSL stilesheets, XHTML, XMLS, RelaxNG, DTD. Main task of the annotation: Named Entity Recognition. Also, a user interface is implemented for navigation of content.
- 2016 [Interactive website](#)  
Website with a JavaScript implementation of an interactive CV builder

## PROJECTS FOR OTHER COMPANIES

- 2018 [Website for "Vintage Pub"](#)  
 Pisa  
Planning and development of a website to promote a local activity ("food and restaurant" field).
- 2018 [Website improvements for "Memphremagog" company](#)  
 Lucca  
Graphic intervention on the company business website: Javascript programming, and some user interface improvements

## GRANTS AND AWARDS

- 2020 | [Collaboration assignment granted](#) by the IT department of University of Pisa
- 2020 | University of Pisa performance ranking, for ICT assistance job position at Medical School
- 2018 | University of Pisa performance ranking, for ICT technical staff assistance job position
- 2018 | Study Grant as selected student for the training event "Make in Italy"

# CERTIFICATES

Coming soon ...	<b>Google Digital Training</b>
2018	<a href="#"><u>Samsung Innovation Camp</u></a>
2018	<a href="#"><u>Digital Food Communication</u></a> , Confcommercio Lucca
2018	<b>First Certificate in English (FCE):</b> Upper-Intermediate-2 (Livello B2 del CEFR), certified by University of Pisa
2018	<a href="#"><u>Make In Italy Festival!</u></a> : digital world meets Italian manufacturing.
2014	<a href="#"><u>BLS</u></a> (Basic Life Support), <i>Croce Rossa Italiana - Comitato area Provinciale di Roma</i>
2010	<a href="#"><u>Attestation de mérite pour l'étude de la langue française</u></a> , <i>Association des Membres de l'Ordre des Palmes Académiques</i>

# TRAINING COURSES AND ATTENDED SEMINARS

2020	<b>AI Week: Public lecture series on Artificial Intelligence</b> , organizer: SFU's School of Computing Science ( <a href="#"><u>online</u></a> )
2020	<b>How AI and Machine Learning can Transform Organizations</b> , organizer: Skyl.ai, Machine Learning Automation For Unstructured Data ( <a href="#"><u>online</u></a> )
2020	<b>What does diversity &amp; inclusion mean in 2020? #GirlBossNight</b> , organizer: Girls In Tech Australia ( <a href="#"><u>online</u></a> )
2020	<b>Explaining the workings of a Deep Neural Network</b> , organizer: <a href="#"><u>AI3 Science Discovery Network (AI3SD)</u></a> ( <a href="#"><u>online</u></a> )
2020	<b>Mitigating Bias in Analytics</b> , organizer: <a href="#"><u>Women In Analytics (WIA)</u></a> ( <a href="#"><u>online</u></a> ). Here I had a really stimulating discussion in the Zoom Rooms with some of the participants. Directly confronting with people living in the U.S. is literally an eye-opener to know the impact of the current discriminations by algorithms.
2018	<a href="#"><u>Samsung Innovation Camp</u></a> : 25 hours training for digital marketing, communications, data analytics, cyber education and innovative use of technologies.
2018	Microsoft seminar at University of Pisa for using <b>Office 2016 Pro Plus</b> instruments and <b>cloud Office 365</b> services.
2018	<a href="#"><u>Make In Italy Festival 2018</u></a> , Thiene (VI): digital world meets Italian manufacturing: tools and technologies for the transition to 4.0 of small / medium-sized business. I won a study grant to have the opportunity to participate.
2018	<a href="#"><u>Digital Food Communication</u></a> , Confcommercio Lucca: using digital instruments for client communications and web promotion of business.

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*In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree*

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*Last update: October 2020*