Chiara Criscuolo

Curriculum Vitae

I am 24 and on the 15th of December 2020 I achieved my Master's degree in Computer Science and Engineering at *Politecnico di Milano*. My interest turns into the field of Data Science with a particular attention to Data Ethics, Data Mining and Databases. I am a positive and goal-oriented person that has a strong inclination to pose questions and curiosities, I am fascinated by ethical issues in particular by those related to Computer Science.

Education

- December M.Sc. in Computer Science and Engineering, 106/110, Politecnico di 2020 Milano, Milan, Italy.
 - M.Sc. Thesis: "Using Functional Dependencies to discover Data Bias," under the supervision of Prof. Tanca Letizia, based in the Database and Data Mining areas, it focuses in Data Science Ethics field. I developed a software in Python, called FAIR-DB (FunctionAl dependencIes to discoveR Data Bias), that detects already existing bias in datasets through Functional Dependencies. I combined Functional Dependencies mined from data with Association Rules notions, introducing a new metric to extract discriminated groups from datasets.
 - Main courses: Data Mining, Philosophical Issues of Computer Science, Autonomous agents and multiagent systems, Game Theory, Natural Language Processing, Hypermedia Applications, Logic and Algebra
- March 2019 B.Sc. in Engineering of Computing Systems, 100/110, Politecnico di Milano, Milan, Italy.
 - Main courses: Databases, Fundamentals of Computer Science, Software Engineer, Algorithms and Principles of Programming Languages, Knowledge Engineering, Artificial Intelligence
 - July 2015 Scientific High School Diploma, 94/100, Liceo Scientifico Galileo Galilei, Siena, Italy.

Course Projects

- February Hypermedia Applications (Web and Multimedia), Charlotte's Web: an
 2019 e-commerce website developed to sell books online. I mostly focused on the front-end part using HTML, SASS and JavaScript languages .
- February **Software Engineering**, *Track Me:* service that tracks the health status of individuals, it consists in the development of the Requirement Analysis and Specification Document and Design Document of the service.
- July 2018 Software Engineering, Sagrada: Java Software of the board game Sagrada.

Working Experience

- April 2021 **Politecnico di Milano, Milan Research fellow**, The research activity now consists of carrying out the study of ethical issues for health data integration to define access policies that are coherent with privacy constraints, *Health Big Data Project*.
- March 2021 **Politecnico di Milano, Milan Laboratory Responsible**, I carry out the now laboratory activities of the course Software Engineering.
 - September Fondazione La Vincenziana, Milan Tutor and Security Responsible,
 - 2017 July I carried out entertainment activities with educational purposes for the students
 2018 who were guests of the accommodation facilities and held a role of responsibility and safety within the structure.

Publications

- March 2021 Chiara Criscuolo, Fabio Azzalini, Letizia Tanca, FAIR-DB: FunctionAl DependencIes to discoveR Data Bias, PIE+Q.
 - December Chiara Criscuolo, Fabio Azzalini, Letizia Tanca, Using Functional De-2020 pendencies to discover Data Bias, POLITesi.

Research Interests

- **Data Science Ethics:** I am very interested in Data Science Ethics in general. The study of moral problems related to data fascinates me because many modern technologies are based on data and are pervasive, so the necessity of this discipline is, for me, the fundamental basis of future directions.
- **Data Mining:** The discovery of existing pattern in data, the prediction of future events and the correct modeling of them is a challenging and enchanting field for me. Thus, Data Science and in particular Data Mining, are central and important interests in my studies.

Skills

- **Project Team** The projects developed during my academic path helped me strengthen the ability of working with other people, increasing my listening and speaking skills.
- Analytical Thinking My master thesis increased my ability of analytical thinking because my supervisor and co-supervisor stimulated me by asking questions and leading me to reason over ethical problems related to real data.
- **Programming Languages** Python, C, Java, Javascript, HTML, SASS, CSS, SQL.
- \circ Computer skills Git, UML, Microsoft Office, ${\rm I\!AT}_{\rm E}\!{\rm X}.$

Languages

- Language: Italian Native or bilingual proficiency level
- Language: English Full professional proficiency level B2 Exam: TOEIC - Listening and Reading Test

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