Alessandro Marrella

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Education

Master of Science in Computer Science   *Sep 2014 – Oct 2016*
Major: Business Informatics
University of Pisa, Italy
Graduation date: 07/10/2016 | GPA: 29.33/30.0

Bachelor's Degree in Business Administration   *Sep 2010 – Sep 2014*
University of Verona, Italy
Graduation date: 11/09/2014 | GPA: 27.3/30.0 | Final grade: 109/110

Exchange year (**Erasmus** scholarship)   *Sep 2013 – May 2014*
University College Dublin, Ireland

Work Experience

Master Thesis Internship   *Sep 2014 – Oct 2016*
ABB AG, *Corporate Research*, Ladenburg, Germany
Title of the thesis: "*Data Anonymization for the Industrie 4.0*"
- Creation of a database of the relevant literature with a review
- Development of a tool to collect data anonymization requirements for data analytics
- Implementation of state-of-the-art anonymization algorithms in Python
- Anonymization of industrial data for frequent pattern mining on event logs and reliability analysis tasks
- Evaluation on the impact of anonymization on privacy and quality
- Improvement of existing models from centralized to distributed
- Presentation of the algorithms and the results to in-house data scientists
- Submission of a paper to the CLOUDSPD'16 workshop

Projects

Scalable spam detection   *Jan 2016*
Created a classifier able to predict spam comments on a website (Reddit.com)
- Context analysis and feature extraction with Word2Vec and SentiWordNet, clustering with K-Means
- Modeling and processing with Hadoop and Spark
Results: 87% accuracy (vs 60% majority classifier), 86% precision, 72% recall

Mobility data mining   *Jun 2015*
- Analysis of GPS traces from ~500 taxis in San Francisco
- Study of the moving points behaviour
- Trajectory clustering with to find the frequent access patterns to the city

Other data mining projects   *Jan 2015 – Jun 2015*
- Classification of Serie A soccer players based on game statistics (Algorithms: C4.5, Random Forest)
- Market basket analysis on transactions from a local supermarket (Algorithms: Apriori, FP-Growth)
- Social Network Analysis on data collected from Last.fm (Algorithms: K-Clique, DEMON)

Skills

Computer skills:	Python, Java, C, PHP, R, Hadoop, Hive, Spark, Weka, KNIME, SQL, SSAS, SISS, SRSS, BigQuery, Data Mining, Machine Learning
Languages:	*Italian*: native, *English*: fluent, *German*: basic
Other skills:	Teamwork, Literature review, Reporting, Problem solving, Critical thinking

Volunteer

Communication Manager - Erasmus Student Network, Pisa, Italy   *Dec 2014 – Jul 2015*

Public Relations Officer - Erasmus Student Network, Dublin, Ireland *Jan 2014 – May 2015*

Emergency Medical Technician - *Croce Verde*, Verona, Italy   *Dec 2012 – Sep 2013*