Jacopo Acquarelli

Summary

I studied Computer Science at the University of Siena (Italy) where I got both my bachelor's and master's degree in Computer Science. During those years I have also been a co-founder of a web services oriented company for more than a year. After graduation, I spent a few months working in an IT company where I could further improve my web programming skills. Apart from those, I have a good knowledge of programming languages (especially Python, Bash, Perl). However, I have no problems to learn and/or improve a new programming language since programming has been my daily bread for years. A few months later, I started my PhD at the Radboud University Nijmegen (The Netherlands) on applying Deep Learning techniques to chemometric data. During these years of PhD, I have been developing mostly new neural networks based methods and applied Deep Learning to various modalities of data (mainly spectral or image data). I am currently working for a software quality company where I am using my expertise on distributes system, software engineering and data analysis.

Experience

TIOBE Software **March 2019 - Present**
Software Engineer Services Eindhoven (The Netherlands)
https://www.tiobe.com

I am helping our customers to get rid of all their software bugs

Radboud University **February 2015 - September 2023**
PhD Candidate Nijmegen (The Netherlands)
https://www.ru.nl

During these years I have been researching on applying deep learning inspired techniques to chemometric data also coming from the medical field. In particular, I have been working on spectroscopy data and datasets with different data modalities available (in particular images).

QuestIT **October 2014 - January 2015**
IT Programmer Siena, Italy
https://www.quest-it.com/

I worked as a web programmer at QuestIT for a few months. I had the opportunity to improve and discover new frameworks for web programming.

Radboud University **February 2014 - July 2014**
Computer Engineer Nijmegen (The Netherlands)
https://www.ru.nl

I applied a clustering method on patient records affected by multiple sclerosis from The Netherlands Brain Bank (NBB) source. The aim was to highlight the textual features that mostly represent each cluster and also the relations between clinical and pathological clustering (these two data are present inside each patient record in two different sections). This allowed me to speculate about which features influence the most the doctor diagnosis. This work has been the subject of my Master Degree Thesis.

Education

Radboud University Nijmegen **2015 - 2023**
Artifical Intelligence PhD
https://www.ru.nl/

University of Siena **2011 - 2014**
Computer Science Master degree
110/110 cum laude
https://www.diism.unisi.it/it

University of Siena **2007 - 2010**
Computer science Bachelor degree
103/110
https://www.diism.unisi.it/it

Publications

Convolutional Neural Networks for Spectroscopic Data Analysis **2023**
Radboud University Nijmegen
https://scholar.google.com/citations?view_op=view_citation&hl=it&user=WENxCJIAAAAJ&citation_for_view=WENxCJIAAAAJ:W7OEmFMy1HYC

PhD thesis

Convolutional neural networks to predict brain tumor grades and Alzheimer's disease with MR spectroscopic imaging data **2022**
Plos one
https://scholar.google.com/citations?view_op=view_citation&hl=it&user=WENxCJIAAAAJ&citation_for_view=WENxCJIAAAAJ:Y0pCki6q_DkC

Spectral-spatial classification of hyperspectral images: Three tricks and a new learning setting **2018**
Remote Sensing
https://scholar.google.com/citations?view_op=view_citation&hl=it&user=WENxCJIAAAAJ&citation_for_view=WENxCJIAAAAJ:9yKSN-GCB0IC

Convolutional neural networks for vibrational spectroscopic data analysis **2017**
Analytica chimica acta
https://scholar.google.com/citations?view_op=view_citation&hl=it&user=WENxCJIAAAAJ&citation_for_view=WENxCJIAAAAJ:u5HHmVD_uO8C

Discovering potential clinical profiles of multiple sclerosis from clinical and pathological free text data with constrained non-negative matrix factorization **2016**
Applications of Evolutionary Computation: 19th European Conference
https://scholar.google.com/citations?view_op=view_citation&hl=it&user=WENxCJIAAAAJ&citation_for_view=WENxCJIAAAAJ:u-x6o8ySG0sC

Languages

Italian
Mother tongue
●●●●●

English
Advanced
●●●●○

Dutch
Beginner
●○○○○