ERIKA GARDINI

PhD student

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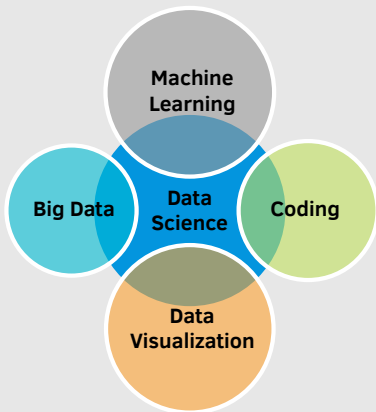
in /in/erika-gardini-b7967b16b/

○ erikagardini

Technical Skills

Overview

Programming

Python • R • C/C++

Java • SQL • LaTeX

C# • JavaScript

Go • Ada • Scala

Other

TensorFlow | Keras
OpenCV | Docker | UML

Soft Skills

Communication • Time Management

Team Working • Positive Attitude

Empathy • Problem Solving

Education

Nov 2018 - Present — **PhD Student, Data Science and Computation** — University of Bologna

Thesis project: "Unsupervised Learning Methods: development and applications on Life Sciences":
- Evolutionary analysis of CNN-induced vector spaces via the Principal Path concept (a topological method for manifold analysis).
- Detection of transition states between different tumor stages or cell cycle phases in order to identify molecular markers of cancer progression from transcriptomics and single-cell RNA-Seq datasets.
- Outlier detection methods combining kernel-based and deep approaches.

Oct 2016 - Jul 2018 — **MEng., Computer Engineering** — University of Bologna

- **Main topics**: Machine Learning, Computer Vision and Image Processing, Data Mining, Artificial Intelligence.
- **Thesis at Kaunas University of Technology (KTU)**: "Human activity Recognition using Machine Learning Classification Models".

Oct 2013 - Oct 2016 — **BEng., Computer Engineering** — University of Bologna

- **Main topics**: Software Engineering, Web Tecnologies and Operating Systems.
- **Thesis**: "Scenari applicativi per Smart Home su piattaforma Home Manager: verso il livello intelligence".
- **Internship at CASY (Center for Research on Complex Automated Systems)**: software development in ROS for the laser functionalities of the SHERPA project's rover.

Experience

2018 - present — **Teaching Assistant** — University of Bologna

- **Courses**: Foundations of Informatics T-1 (28004), Deep Learning (91250) and Computer Science (07276).

Awards

2018 — **Winner of the Woman Dissertation Award**
The award was given to female researchers for their thesis in Machine Learning and came with a job offer by McKinsey & Company and the financial support to attend the Open Data Science Conference 2018.

2018 — **Winner of the Deserving Student Award**
The scholarship was given by the University of Bologna to the 277 best students.

2018 — **Finalist of the Next Generation Woman Leaders Competition**
One of the eight finalist in Italy to attend the event organized by McKinsey & Company.

2011 — **Third place in "Progetta il futuro" (edition 2010-2011)**
The prize was given by the Chamber of Commerce of Macerata to the project "Eco Sub Bed".

Publications

E. Gardini, F. M. Giorgi, S. Decherchi, and A. Cavalli, "*Spathial*: an R package for the evolutionary analysis of biological data" in Bioinformatics, btaa273, 2020.

E. Gardini, M. J. Ferrarotti, S. Decherchi and A. Cavalli, "Walking through the Music and Visual Art Style Space via Computational Intelligence", [Submitted in Cognitive Computation]