



# ALESSIA SIMONE

## Data Scientist

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Cassibile, SR

alessia-s2

## ACADEMIC PROJECTS

### VPD - Voice Pathology Detection

Detecting the presence of voice pathology with ESP32 device throw 5 seconds of "a" sound

2023

### Smart Agriculture - Automatic Gardening and Watering System

Automatically turn on the water pump based on soil moisture and temperature algorithm with ESP32

2023

### Smart HealthCare - CPS for Stress Detection

Wearable prototype for my master thesis project to detect stress peaks at 94% of accuracy from biometric measurements

### Tumour Brain MRI Generation

Conditional LS-WGAN Implementation of rumoured and normal brain MRI with FID of 106.8

### Hand-Held Object classification

Image classification with distribution shift throw CNN, implemented without the usage of bounding boxes with an accuracy of 70%

### Depression Epidemiological Analysis

Utilized statistical models to analyze dietary survey data, identifying an association between depression and bad eating habits with eggs, fish and pickles as good candidates to reduce depression

### Fetal Health Classification

Classification of the fetal health status as a binary problem on about 2000 with supervised, unsupervised and semi-supervised techniques, reaching a maximum accuracy of 90%

### PIMA Indians diabetes prediction

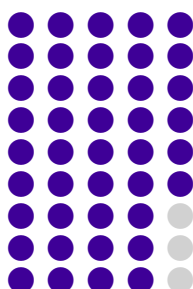
Binary classification of diabetes presence on about 500 individuals, detecting random forest as the optimal model with 90% of accuracy

### Type of Glass Analysis

Classification of eight different types of glass with VEV model-based clustering, detecting 5 clusters with BIC of -1323

## SKILLS

Python  
SQL  
R  
MatLab  
Netlogo  
Google Cloud  
C++  
Apache Spark  
Microsoft Azure



## LIFE PHILOSOPHY

*"In the midst of chaos, there is also opportunity."*

## EDUCATION

M.D. in Data Science - Curriculum Data Driven and Application for IoT  
University of Catania

2023

B.D. in Economics and Management of Tourism Enterprises  
University of Catania

2021

## CERTIFICATES

- English for Specific Purposes (Smart Cities and Smart Grid)  
Politechnika Poznańska
- English Certificate 74/100 (C2 Proficient)  
EFSET English Certificate
- Goethe-Zertifikat B2  
Goethe Institut
- Structuring for Continuity, Growth and Internationalization  
SDA Bocconi
- Innovation Management and Entrepreneurial Processes  
Bologna Business School
- Business Intelligence and International Development in the post-Covid era  
LUISS Business School

## STRENGTHS

Adaptable Resilient Determinate  
Team-Work Positivity-spreading

## LANGUAGES

