

# Iason C. Tsardanidis

Curriculum Vitae



## PERSONAL DETAILS

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*Birth:* June 23, 1993  
*Address:* 84 Agiou Ioannou St. 15342, Agia Paraskevi, Attiki  
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*GitHub:* **JasonTarzan**

## EDUCATION

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- **MSc. in Data Science (Laurea Magistrale, 120 ECTS/CFU)(Grade 110/110 cum laude)** **2018 - 2020**  
*La Sapienza Università di Roma*  
-1st year Honored Student (Graduatorie Relative Al Bonus Esami)  
-Highly Qualified student for the A.A 2019-2020 (Ammissione al Percorso d'Eccellenza)
- **BSc. in Physics (Ptychio, 240 ECTS)(Grade 7.73/10)** **2011 - 2016**  
*National and Kapodistrian University of Athens*  
-Major in Astrophysics, Astronomy and Mechanics
- **Secondary Education (Lyceum)** **2008 - 2011**  
*First General High School of Agia Paraskevi, Attiki, Greece*

## OTHER CERTIFICATES

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- **Certificate in Observational Meteorology (Grade 100/100)** **2016**  
*Hellenic National Meteorological Service - Greek Airforce*

## **WORK EXPERIENCE**

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- **Research Associate - Data Scientist** 2020 - Today  
*Beyond Center of Excellence - National Observatory of Athens*  
Research on Big Data, Artificial Intelligence and Machine Learning techniques applied on Agricultural monitoring and Agri-hubs using Earth Observation and Remote Sensing.
- **Data Science Intern** 2020  
*ENEL GLOBAL SERVICES S.R.L., Rome, Italy*  
Master Thesis on Machine Learning and Deep Learning techniques implementation for the estimation of Power Outages events due to inclement meteorological weather conditions applied on the energy supply network of Italy.
- **Research Associate - Data Scientist** 2017 - 2019  
*SmartRUE - Hellenic Institute of Communication and Computer Systems (ICCS)*
  - (2017 - 2018) Research on Artificial Intelligence, Machine Learning and Time Series Forecasting methods applied on Wind and Solar Power Forecasting for Renewable Energy Sources in Greek islands and continental country using Meteorological Data.
  - (2019 Summer Stage) Assisted in the construction of a robust CNN model for the prediction of the estimated energy produced from Wind and Solar energy parks using Meteorological Data and taking into account local factors.
- **Compulsory Military Service, Greece** 2016 - 2017  
*Greek Airforce*  
Weather Observer for the Hellenic National Meteorological Service at stations of *Athens (Elliniko)* and *Santorini*.
- **Tutoring** 2012 - 2015  
*Tutoring on Mathematics, Physics and Geometry for students of secondary education.*

## **SEMINARS, CONFERENCES, WORKSHOPS ATTENDED**

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- **Training Camp ENEL \*\* Data Science for Business \*\*** 2019  
*Training camp of total 20 hours that took place on "La Sapienza" Università di Roma, consisted of tech talks, workshops and a final project presentation on topic related to Business Engagement and inventiveness applied on the field of Data Science*

- **Attended the 7th International Particle Physics Materclasses at Democritos Research Center** 2011

*This international event was organized by the European Particle Physics Outreach Group.*

## RESEARCH EXPERIENCE

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- **Master Thesis** 2020

*"Intelligent Outages Prediction due to Inclement Weather Local Phenomena"*

Thesis at the Faculty of Ingegneria dell'informazione, Informatica e Statistica of La Sapienza Università di Roma, Italy in collaboration with ENEL GLOBAL SERVICES S.R.L.

Supervisors: Prof. Pierpaolo Brutti, Dr. Alessandro Perina

Abstract: This thesis aims in the integration of an outages prediction mechanism, implementable on the electrical grid-like facilities of the Italian power network. Based on real data taken from industrial utilities, a detection model is elaborated in order to forecast accidental failures in the system due to inclement local weather phenomena. The general goal of the whole project is the accurate prediction of the potentially harmful for the installments days based on the daily meteorological prognoses and the estimation of the total impact on the entire network system. Different predictive models were trained on different areas of the Italian territory taking into consideration the local weather factors and the various topical system characteristics. In addition, several statistical machine learning routines and techniques inaugurated in order to handle with the problem of high data sparsity and label noise coming from secondary unlabeled sources. In conclusion, an evaluation of the developed methods performed with the view to compare directly on several already existed works in the *state-of-the-art* and assess the benefits and the applicability for power industry.

- **Bachelor Thesis** 2016

*"High Energy Radiation from Isolated Pulsars"*

Thesis at the Section of Astrophysics, Astronomy and Mechanics, Department of Physics, University of Athens, Greece.

Supervisor: Prof. Dr. Apostolos Mastichiadis.

Abstract: In this work I focused on the production of a *gamma-ray* theoretical spectrum of the Pulsar *Geminga* and the comparison with the observed ones. Based on the *Polar Cap Model* and the mechanisms of *Curvature Radiation (CR)* and *Inverse Compton Scattering (ICS)* I created an algorithm in *C++* and *MATLAB* environment, as well I took into account corrections because of the absorption phenomenon of *Magnetic Pair Creation* and the interaction of  $\gamma$  photons with adjacent magnetic lines of Pulsar's outer magnetosphere.

## SKILLS

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*Languages:* Greek (Mother Tongue)  
English (Level of Proficiency certificate in English-C2)  
French (Level Delf-B1)  
Italian (Basic Knowledge)

*Computer Skills:* Programming Skills (Python,R,MATLAB,SQL,C/C++,Tableau,Git.)  
Operating Systems (Linux-based,Windows,macOS)  
Type Setting (Shell scripting,L<sup>A</sup>T<sub>E</sub>X,Office,Logger Pro,Origin)

## ACTIVITIES

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*Wrestling:* Luta Livre,B.J.J,Pankration,Greco-Roman,M.M.A.

- **Gold Medal**(2016) in Greek National Championship of *Kato Pankration* at 66 kg.
- **Silver Medal**(2015) in Greek National Championship of *Brazilian Jiu-Jitsu* at 67.5 kg.
- **Bronze Medal**(2017) in Greek National Championship of *Brazilian Jiu-Jitsu* at 67.5 kg.

*Other Activities:* Gym,Cross-fit,Hiking,Natural Fitness,Basketball,play guitar.

## RECOMMENDATION LETTERS

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- **Prof. Dr. Pierpaolo Brutti**  
Dipartimento Scienze Statistiche of La Sapienza Università di Roma, Italy  
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- **Prof. Dr. Nikolaos Hatziargyriou**  
Electrical and Computer Engineering Department of National Technological University of Athens, Greece  
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- **Prof. Dr. Apostolos Mastichiadis**  
Section of Astrophysics, Astronomy and Mechanics, Department of Physics at the University of Athens, Greece  
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- **Prof. Dr. Nektarios Vlahakis**  
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