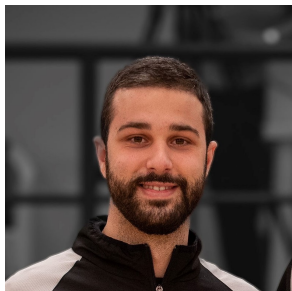## PERSONAL INFORMATION

Gaetano Settembre

- Via Pietro Micca, 78 - 70024, Gravina in Puglia (BA), Italy
- (+39) 333 40 76 393
- gaetanosettembre@gmail.com
- www.linkedin.com/in/gaetano-settembre/
- ORCID 0000-0002-0592-8575

Gender Male | Date of birth 11 January 1996 | Nationality Italian

About me

Post Graduated Data Science student. IT and data enthusiast with an interest in Data Analysis, Machine Learning, and full-stack development.

Passionate about new technology learning, exploration and engineering with strong interpersonal skills and auto didactic tendencies. I've developed a particular interest in research during my internship at Institute of Crystallography, in which I have written my thesis. I would love to advance my understanding multi/hyperspectral data analysis further, through PhD study and with experts in the field.

WORK ACADEMIC EXPERIENCE

Oct 2021 – Mar 2022

Curricular Internship

Institute of Crystallography c/o CNR
Via Giovanni Amendola, 122/O - 70126, Bari, Italy

- ETL (Extract, Transform, Load) process of crystallographic data from open source databases
- Exploratory analysis of crystallographic data and non-parametric statistical tests
- Training, evaluation and tuning of ML (Machine Learning) models for crystal system determination (multi-class classification task)
- High-performance Models Deployment and development of Web Platform called CrystalMELA (Crystallography MachinE LeArning) [2]

Nov 2018 – Apr 2019

Curricular Internship

SER&Practices (SER&P)
Via Edoardo Orabona, 4 - 70125, Bari, Italy

- Development of "Serious games" following the Red Team vs. Blue Team approach to improve the skills of the SOC (Security Operation Center) and CSRIT (Computer Security Incident Response Team) team
- Development of malicious attack scenarios on Linux Servers and Web Applications with the intention of extracting sensitive data using the Cyber Kill Chain framework
- Penetration Test and Vulnerability Assessment
- Data collection, data analysis (logs, alerts, etc.) and reporting using the IBM Security QRadar SIEM

EDUCATION

Oct 2019 — Mar 2022

Master's Degree in Data Science (LM-91)

University of Bari "Aldo Moro", Department of Computer Science, Italy

Final grade: Full mark with honors - 110/110 & Lode (highest possible grade in the Italian system).

Thesis: "Analisi di dati cristallografici e costruzione di modelli predittivi". Supervisors: Prof. Nicoletta Del Buono; Dr. Rosanna. Rizzi, Dr. Nicola Corriero

PA Code: 02-0000681044-0002282158

Sep 2015 — Apr 2019

Bachelor's Degree in Computer Science (L-31)

University of Bari "Aldo Moro", Department of Computer Science, Italy

Thesis: Red Team vs Blue Team: Data Exflitration in Government". Supervisor: Prof. Danilo Caivano

PA Code: 02-0000681044-0002288080

Aug 2010 — Jul 2015   High School for Scientific Studies

High School "G. Tarantino", Applied Science/s curricula, Gravina in Puglia, Italy

CERTIFICATIONS AND COURSES

Apr 2022
– **Machine Learning with Python**   IBM
   Certificate ID Number: 968f2ab5ed844758b714235e98b5e287
– **Deep Learning Essentials**   IBM
   Certificate ID Number: 14c4279c8c934daa825c07eb61df8587

Oct 2021
– **Data Analysis using Python**   IBM
   Certificate ID Number: caf35b5e29d44ab4a5239bfd607fd182
– **Data Visualization using Python**   IBM
   Certificate ID Number: 0355a89d6c694ed8bc46eb00e9112452
– **Data Science Methodologies**   IBM
   Certificate ID Number: acef4f90bcbe449782e429a1146a2a49
– **Data Science Foundations - Level 1 and 2 (V2)**   IBM
   Certificate ID Number: c429ffdd4c3e470185e528830c3e1e35

May 2020
– **Corso "Sicurezza e Tutela della salute dei lavoratori" (Generale)**   University of Bari
   Certificate Code: ojMByztiAg

Dec 2019
– **Basic Course GDPR Regulation 679/2016**   Dati360.it - Legal Suite
   Certificate Code: 7cb536a6-6a41-49d6-ac84-e723fc7339ac

Jul 2019
– **2-day QRadar BP Technical Enablement course**   IBM and SERLAB

Sep 2018
– **English Assessment (Internal certification)**   University of Bari

May 2013
– **European Computer Driving Licence (ECDL) Full Standard Certificate**   AICA
   Certificate Code: IT 1969501, Skill Card: 1969501

Info: All badges of verified achievements from IBM are available at the following link: https://www.credly.com/users/gaetano-settembre/badges (Credly profile).

NETWORKS AND MEMBERSHIP

Oct 2021 – Current   **Mathematics In Data AnalysiS** - (Midas) research group at the University of Bari "Aldo Moro", Italy, currently coordinated by Prof. N. Del Buono.

Jun 2019 — Current   **2hands Organization** volunteer.   Environmental protection through cleanups, innovative projects and awareness raising.

Jan 2014 – Current   **Federazione Italiana Pallacanetro** - (FIP), basketball referee (Id. A056193).

HONOURS AND AWARDS

Oct 2020   Referee authorized to officiate "Serie C Gold" (men) and "Serie B" (women) basketball games.

Oct 2018   Referee authorized to officiate "Serie C Silver" basketball matches.

Sep 2016   Regional referee authorized to officiate "Serie D" basketball games.

Oct 2013   Institute representative - High School "G. Tarantino".

LANGUAGE SKILLS

Mother tongue Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1	B2	B1	B1	B1
English Assessment (Internal certification) issued by University of Bari				

English

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

DIGITAL SKILLS

Languages Python, Java, JavaScript, C/C++, R, MATLAB, HTML, PHP, CSS, LaTeX

Database MySQL, PostgreSQL + PostGIS, MongoDB, Neo4j

Versioning Git, SVN

Data Science scikit-learn, numpy, pandas, tensorflow, pytorch, matplotlib, seaborn, Tableau, Apache Spark, spaCy, NLTK, Data mining e machine learning: Knime, Weka, Orange

IDE Visual Studio / Visual Studio Code, PyCharm, Eclipse, NetBeans, RStudio, Jupyter, Google Colab

Applications Microsoft Office Suite, Collaborative tools (Trello, Slack, Microsoft Teams), AutoCAD 2D/3D

OSs Windows, Unix Linux

OTHER INFORMATION

Driving licence B

PUBLICATIONS

[1] **Machine Learning approaches for predicting Crystal Systems: a brief review and a case study**
Paper ID: 1091, to appear on Proceeding of 8th International Conference on Machine Learning, Optimization, and Data Science – LOD 2022 – September 18–22, Certosa di Pontignano (Siena), Tuscany, Ed(s) Giuseppe Nicosia, Panos Pardalos, Lecture Notes in Computer Science, 2022,Springer, Cham, ISSN: 0302-9743 (print); 1611-3349 (web).
For this publication, the publisher's offcial letter of acceptance is attached.

[2] **CrystalMELA: A new Crystallography MachinE LeArning platform for crystal system determination**
Article submitted to Journal of Applied Crystallography (IUCr), ISSN: 1600-5767.
Technical report, 1/22, Department of Mathematics, Bari, Italy,18 July 2022.

Gravina in Puglia (BA) – 18 Jul, 2022

Gaetano Settembre