

## PERSONAL INFORMATION

Name **CLAUDIO MOCCI**

E-mail

Nationality

Date of birth

## WORK EXPERIENCE

- Date **JULY 2022 – ONGOING**
- Name of the employer **ALTEN**
- Position held **CONSULTANT IN ARUBA SPA - BACKEND DEVELOPER**
- Main activities – key words  
Involved in developing a white-label eCommerce in .Net Core 6 for Aruba SPA.  
Developing microservices and restful APIs.  
Design, implementation of databases in Mysql and MongoDB.  
Dapper (ORM).  
Docker.  
Event based and asynchronous messages - Apache Kafka.  
Grafana dashboards implementation exploiting Prometheus metrics.  
Logging implemented with Serilog and analyzed by ElasticSearch.  
Secrets managed with Vault.  
Spring cloud data flow streams to continuously backup new recorded data.  
Git for code versioning  
Jira
  
- Date **SEPTEMBER 25TH 2013 – ONGOING**
- Name of the employer **Scuola Superiore Sant'Anna**
- Working group **ICT-COISP ([www.ict-coisp.it](http://www.ict-coisp.it))**
- Position held **Research collaborator**
- Main activities  
The research activity is focused on the application of Machine learning and AI techniques for industrial processes analysis and for the optimization of the processes themselves. Years of experience with Python (numpy/pandas/scikit-learn/tensorflow) and Matlab.  
  
Design and development (C#, T-SQL) of Multi-Agent systems for managing plants in steelwork.  
  
Involvement in the design and development of a MES (Manufacturing Execution System) for Al Gharbia Pipe Mill in the UEA (front-end AngularJs and back-end C#/Sql Server).  
  
Involved in several European Projects funded by **RFCS** (Research Fund for Coal and Steel) as **data analyst, software developer and Database administrator**.  
  
Programming languages known: C#, Python. For data management: MS SQL Server (T-SQL, SSIS processes), MongoDB, MySQL. Others: AngularJs, HTML, Javascript, CSS, Kendo UI.  
  
Version control: Git and TFS
  
- Date **JANUARY 2013 – JULY 2013**
- Name of the employer **Cluster Reply**
- Position held **Consultant in Banca Intesa San Paolo**
- Main activities  
Analysis, design and development of databases, stored procedures, OLAP cubes, SSIS processes. Software development in VB.NET – C#.

## LIST OF PUBLICATIONS

- M. Vannucci, V. Colla, C. Mocci et al. **Prediction of steel coils mechanical properties and microstructure by using deep learning and advanced data preprocessing techniques**  
Conference: The 20th International Conference on Modeling & Applied SimulationAt: Virtual event. September 2021
- V. Iannino, C. Mocci, V. Colla. **A Hybrid Peer-to-Peer Architecture for Agent-Based Steel Manufacturing Processes.**  
Conference: 17th IFAC Symposium on Information Control Problems in Manufacturing INCOM 2021. June 2021
- V. Iannino, C. Mocci, V. Colla. **A Brokering-Based Interaction Protocol for Dynamic Resource Allocation in Steel Production Processes**  
Conference: WorldCist'21 - 9th World Conference on Information Systems and Technologies. March 2021
- F.V. D. Berg et al. **The Use of Advanced Data Analytics to Monitor Process-Induced Changes to the Microstructure and Mechanical Properties in Flat Steel Strip**  
**IMPACT AND OPPORTUNITIES OF ARTIFICIAL INTELLIGENCE TECHNIQUES IN THE STEEL INDUSTRY. FEBRUARY 2021**
- I. Matino et al. **Machine Learning-Based Models for Supporting Optimal Exploitation of Process Off-Gases in Integrated Steelworks.**  
Impact and Opportunities of Artificial Intelligence Techniques in the Steel Industry. February 2021
- V. Iannino, C. Mocci, M. Vannucci, V. Colla. **An Event-Driven Agent-Based Simulation Model for Industrial Process.**  
Applied Sciences 10(12):4343. June 2020
- A. De Melo Souza, D. Amu, C. Mocci et al. **Data mining and modelling.**  
Steel Times International 42(7):36-39. October 2018
- F. V. D Berg, P.J.J. Kok, C. Mocci, M. Vannucci, V. Colla et al. **Product uniformity control - A research collaboration of European steel industries to non-destructive evaluation of microstructure and mechanical properties.**  
Studies in Applied Electromagnetics and Mechanics 43:120-129. 2018
- C. Mocci, M. Vannucci, V. Colla, F.V.D Berg, R. Schmidt. **SOM analysis of IMPOC data in relation to process parameters in strip steel production.**  
Proceedings of 12<sup>th</sup> European Conference of Non-Destructive Testing ECNDT 2018
- C. Mocci, A. Maddaloni, S. Cateni et al. **A dive into the Specific Electrical Energy in Steelworks.**  
Chapter in Trends and Advances in Information Systems and Technologies, pp 714-723, 2018
- F. V. D Berg, P.J.J. Kok, C. Mocci, M. Vannucci, V. Colla et al. **Results of the European collaborative project "Product Uniformity Control" to improve the inline sensing of mechanical properties and microstructure of automotive steels**  
Proceedings of European Conference on Non-Destructive Testing ECNDT 2018
- G. Nastasi, C. Mocci, V. Colla, F.V.D Berg, W. Beugeling. **SOM-based analysis to relate non-uniformities in magnetic measurements to Hot Strip Mill Process Conditions.**  
Chapter in Multidisciplinary Approaches to Neural Computing, pp. 223-231, 2018.
- D. Amu, E. Yaqub, C. Mocci, V. Colla, M. Neuer, G. Fricout et al. **A reference architecture for Quality Improvement in Steel Production.**  
Proceedings of 1<sup>o</sup> International Data Science Conference IDSC, 2017.
- F.V.D. Berg, P. Kok, H. Yang, C. Mocci, G. Nastasi, V. Colla et al. **In-line Characterisation of Microstructure and Mechanical Properties in the Manufacturing of Steel Strip for the purpose of Product Uniformity Control.**  
Proceedings of 19th World Conference on Non-Destructive Testing WCNDT 2016.

## EDUCATION AND TRAINING

- Date 2012
- Type of qualification Bachelor degree in Computer Engineering
- University Università di Pisa - Engineering
- Score 107/110
  
- Date 2008
- Type of qualification IT specialist
- High School Istituto Tecnico Industriale G.M Angioy, Sassari
- Score 100/100

## OTHER SKILLS AND COMPETENCES

MOTHER LANGUAGE ITALIAN

OTHER LANGUAGES

**ENGLISH: GOOD**  
**SPANISH: GOOD**  
**CHINESE: BEGINNER**  
**ARABIC: BEGINNER**

**EXTRAS** Team working skill, gained by attending a lot of team projects  
Good relationship skills  
Good at managing my own work

## SOCIAL ACTIVITIES

B (car)

## DRIVER LICENSE