

# Lorenzo Tenti

## Curriculum vitae

### Experience

- 2022 **Senior Data Engineer**, *Century Tech*, London, United Kingdom.
  - Design and develop data infrastructure, data lake and data warehouse.
  - Productionise Machine Learning models - MLOPs.
- 2021 **Senior Data Engineer**, *Kobalt Music*, London, United Kingdom.
- 2019 **Data Engineer**, *Kobalt Music*, London, United Kingdom.
  - Development of ETL pipelines, involving Oracle DB, Spark EMR, Kafka.
- 2018 **Big Data Engineer**, *IQVIA*, London, United Kingdom.
  - Development of highly performant and scalable code running on top of IQVIA Big Data Platform (Spark/Hive/Impala/Hadoop).
- 2017 **Big Data Engineer**, *Cloudwick Technologies UK*, London, United Kingdom.
  - Data analysis and data processing using Scala/Spark.
  - Linux system administration & Hadoop ecosystem administration.
  - Hadoop ecosystem tools like HIVE, HBASE, PIG, SQOOP, OOZIE etc.
  - Amazon Web Services.
- 2014-2016 **PhD in Computational Chemistry**, *University of Ferrara, Italy*, supervisor: Prof. Celestino Angeli.
  - Development of new computational methods for quantum chemistry.
  - Use of commercial HPC software, development of new packages.
  - Bash and Linux environment.
  - Python (as scripting language and tasks automation tool).
  - Fortran (for number crunching and scientific programming).

### Technical skills

Programming	Scala, Spark, Python, SQL, Java, Bash, Fortran, Javascript.
Systems	Unix/Linux, Android, Windows.
Hadoop	Installation and security using Kerberos, Knox and Ranger. Tools: Hive, Impala, HBase, Pig, Sqoop, Oozie.
Cloud	Amazon Web Services.
Typography	LaTeX
Other techs	Snowflake, dbt, Kafka, Docker, Maven, SBT, git, CircleCI, GitLab, terraform, Kubernetes, Flux, Helm

### Certifications

- 2017 **Hortonworks HDP Certified Administrator**.
- 2017 **AWS Certified Solutions Architect - Associate**.

### Education

- 2013 **Master in Chemistry**, *University of Ferrara*, vote 110/110 with honors.
- 2011 **Bachelor in Chemistry**, *University of Ferrara*, vote 110/110 with honors.

## Training

- 2015 Workshop: "European Workshop on Theoretical approaches of Molecular Magnetism, JUJOLS VIII", Bages, France. 5 days. Oral presentation.
- 2015 Two stays at "Departamento de Química Física", Universidad de Sevilla, Spain. 40 days; 3 months.
- 2015 Summer school: "European Summerschool in Quantum Chemistry", Palermo, Italy. 2 weeks. Poster presentation.
- 2015 Course: "Python for computational science", CINECA, Bologna, Italy.
- 2014 Stay at "Laboratory of Physical Chemistry", ETH, Zurich, Switzerland. 3 weeks.
- 2014 Summer School: "Methods in Molecular Energy Research: Theory and Spectroscopy", Gelsenkirchen, Germany. 1 week. Poster presentation.
- 2014 Summer School: "Sostrup Summer School – Quantum Chemistry and Molecular Properties", Himmelbjergvejens Natur og Idrætsefterskole, Ry, Denmark. 2 weeks. Poster presentation.
- 2014 Workshop: "New wavefunction methods and entanglement optimizations in Quantum Chemistry", Mariapfarr, Austria. 4 days.
- 2014 Course: "Efficient use of Molecular Dynamics simulation applications in an HPC environment", CINECA, Bologna, Italy.
- 2014 Course: "Introduction to Fortran 90", CINECA, Roma, Italy.
- 2013 Erasmus Placement: "Laboratoire de Chimie et Physique Quantiques", Université Paul Sabatier, Toulouse, France. 3 months.
- 2013 Course: "Introduction to Parallel Computing with MPI and OpenMP", CINECA, Bologna, Italy.
- 2013 Course: "HPC Scientific programming: tools and techniques", CINECA, Bologna, Italy.
- 2013 Degree of excellence: "Ferrara School of Chemistry".

## Languages

Italian	Excellent	<i>Mother tongue</i>
English	Advanced	<i>Level C1</i>
French	Basic	<i>Level A1</i>
Spanish	Basic	<i>Level A1</i>

## Publications

- 2017 Tenti, L., Giner, E., Malrieu, JP., Angeli, C., *Strongly localized approaches for delocalized systems. I. Ground state of linear polyenes*, Computational and Theoretical Chemistry, DOI: 10.1016/j.comptc.2017.01.021.
- 2017 Giner, E., Tenti, L., Angeli, C., Ferré, N., *Computation of the isotropic hyperfine coupling constant: efficiency and insights from a new approach based on wave function theory*, Journal of Chemical Theory and Computation, DOI: 10.1021/acs.jctc.6b00827.
- 2016 Giner, E., Tenti, L., Angeli, C., Malrieu, JP., *The "Fermi hole" and the correlation introduced by the symmetrization or the anti-symmetrization of the wave function*, J. Chem. Phys, 2016, 145, 124114.
- 2016 Tenti, L., Maynau, D., Angeli, C., Calzado, J. C., *Highly efficient perturbative + variational strategy based on orthogonal valence bond theory for the evaluation of magnetic coupling constants. Application to the trinuclear Cu(II) site of multicopper oxidases*, Phys. Chem. Chem. Phys, 2016, 18, pp 18365-18380.
- 2014 El Khatib, M., Bendazzoli, G. L., Evangelisti, S., Helal, W., Leininger, T., Tenti, L., Angeli, C., *Beryllium Dimer: A Bond Based on Non-Dynamical Correlation*, J. Phys. Chem. A, 2014, 118 (33), pp 6664-6673.
- 2013 Angeli, C., Cimraglia, R., Dallo, F., Guareschi, R., Tenti, L., *Dependence of the population on the temperature in the Boltzmann distribution: a simple relation involving the average energy*, J. Chem. Educ., 2013, 90 (12), pp 1639-1644.