Lorenzo Tenti

Curriculum vitae

Personal Information

Date of Birth	April 10th, 1989	Nationality	Italian
Address	28 Dunsterville Way, SE1 3RQ London, United Kingdom	Sex	Male

Experience

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.
- Version control using git/GitLab.
- Testing using MRUnit, JUnit, ScalaTest.

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 Shell Scripting, Fortran, MATLAB/Octave (Basic knowledge of HTML, 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 tools	Ansible, Maven, SBT. Version control, continuous integration and continuous deployment with git and GitHub, GitLab, BitBucket.

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.

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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", Himmelbjergegnens Natur og Idraetsefterskole, 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", Universitè 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	*Mother tongue*
English	Advanced	*Level C1*
French	Basic	*Level A1*
Spanish	Basic	*Level A1*

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., Cimiraglia, 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.

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