LORENZO PALMIERI

(born in Modena, 27/01/1982)



Via Tonini 174, Modena, 41126, Italy Tel: +39 349 67 42 436; Email: <u>lollopalm@gmail.com</u> <u>http://algo.ing.unimo.it/people/lorenzo</u>

# **PROFESSIONAL EXPERIENCE:**

• Apr 2012 – present

Attending Graduate at the "Molecular Modelling and Drug Design Laboratory" of Prof. G. Rastelli, Pharmaceutical Sciences Department, Università di Modena e Reggio Emilia, Italy.

<u>Project title</u>: Protein-protein interactions analysis for the design of interaction modulator molecules.

### **EDUCATION AND TRAINING:**

• Jan 2009 – Mar 2012

PhD student at "Multiscale Modelling, Computational Simulations and Characterization in Material and Life Sciences" School of Graduate Studies, Università di Modena e Reggio Emilia, Italy.

<u>Thesis title</u>: Analysis and prediction of residue solvent accessibility in proteins and hot spots in Protein-Protein Interaction. Focus is also on Extraction of structured motifs from DNA sequences.

Visitor student at the University of Cambridge (U.K.) for 10 months under the supervision of Prof. Sir Tom L Blundell. The main topic of research within the Structural Bioinformatics research group was focused on *HotSpots analysis in Protein-Protein Interaction sites*.

Basic training: genetics, algorithms and data structures, Chemoinformatics, drug design, Bioinformatics.

<u>Training to research courses</u>: sequence alignment algorithms for DNA and proteins, fast access algorithms, protein homology modelling and fold recognition, dynamical systems, data analysis, experimental design methodology, machine learning (neural networks, SVMs, genetic algorithms, etc. ) and optimisation heuristics, computational neuroscience, high performance computing for Proteomics, biological databases management.

• Feb 2005 - Jul 2007

"Laurea Magistrale", approx. equivalent to M.Sc., in Information Engineering, Università di Modena e Reggio Emilia, Italy.

<u>Thesis title</u>: "InSite": project and implementation of an auxiliary software tool for prediction of interaction sites in proteins.

I took part in the Erasmus project, living and studying 4 months at the University of Exeter (U.K.), standing several exams.

*Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.* 

• Oct 2001 - Feb 2005

"Laurea", approx. equivalent to Bachelor Degree in Information Engineering, Università di Modena e Reggio Emilia, Italy.

Thesis title: Project and development of mobile robots: experiencing Lego Mindstorms and RF-ID technologies.

## **CONFERENCES ATTENDED:**

- Therapeutic Applications of Computational Biology and Chemistry 2010, 1-3 March 2010, EBI Wellcome Trust Conference Centre, Hinxton (Cambridge), U.K.
  Presentation of a poster titled "*Physiochemical property-based prediction of solvent accessibility from protein sequence*".
- Biological Chemistry & Medicinal Chemistry Postgraduate Symposium, 10 Dec 2010, Chemistry Dept, University of Cambridge, U.K.
- 2nd International Conference on Information Technology in Bio- and Medical Informatics (DEXA ITBAM 2011), Aug 29<sup>th</sup> Sept 2<sup>nd</sup> 2011, Toulouse, France.

Oral presentation of submitted research article titled "A High Performing Tool for Residue Solvent Accessibility Prediction".

# WORKSHOPS ATTENDED:

- "A Practical Introduction to Chemoinformatics", 21-24 Jun 2011, The Information School, University of Sheffield, U.K.
- "High Performance Computing for Proteomics", 12 Dec 2011, Consorzio Interuniversitario CINECA, Bologna, Italy.
- "Bioinformatics for Proteomics", 13-14 Dec 2011, Consorzio Interuniversitario CINECA, Bologna, Italy.

# **PUBLICATIONS:**

 Palmieri L, Federico M, Leoncini M, Montangero M. "A High Performing Tool for Residue Solvent Accessibility Prediction". Springer LNCS - Information Technology in Bio- and Medical Informatics, vol. 6865/2011: 138-152.

## **COMPUTER SKILLS:**

- <u>Operating systems</u>: Unix/Linux, Microsoft Windows, MacOS.
- <u>Programming/Markup</u>: C, C++, Java, Python, R, SQL, Shell scripting, MatLab, VHDL, LabView, (X)HTML, Latex. Basic knowledge of Perl.
- <u>Software</u>: PyMol, Chimera, Visual Molecular Dynamics, Discovery Studio, AutoDock Tools, Orange, Weka, MS Office, OpenOffice and LibreOffice suites.

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#### **BIOINFORMATICS SKILLS:**

- Databases: PDB, DSSP, ASEdb, SCOP, CREDO, PICCOLO, GenBank, GEO, PubMed.
- <u>Programming</u>: BioJava, BioPython, SMILES/SMARTS.
- <u>Online resources</u>: Several on-line databases and tools for Bioinformatics and Chemoinformatics.

### **LANGUAGE SKILLS:**

- *Italian*: native speaker.
- English and Spanish: fluent speaking, reading, and writing.
- *French*: intermediate knowledge
- *Esperanto*: basic knowledge.

#### **ADDITIONAL INFORMATION:**

I feel comfortable about working in team, in sharing knowledge and participating in discussions with team members and collaborators, although I'm also able to work independently to an established plan, prioritise and work to tight deadlines. I like reading, listening to music, travelling and experiencing different cultures. I like sports and social life among people. Apart from studying in Exeter and Cambridge (U.K.) for more than one year, I've been living about one year in Dublin (Ireland) and Valencia (Spain), working and significantly improving my language and social skills.