


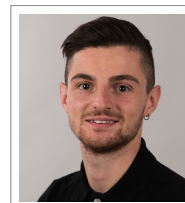


Simone Rubinacci

Resume

<http://srubinacci.github.io> *
Genopode, UNIL-Sorge, 1015, Ecublens, CH
rubinacci.simone@gmail.com
+41 021 692 53 79
  



Personal statement

I am currently a postdoctoral researcher at University of Lausanne. My research is mainly focused in the development of statistical methods for genotype imputation and haplotype phasing.

Relevant Research Activities

- Jul 20 - **Postdoctoral researcher (Systems and Population Genetics Group)**, Research interests: imputation and phasing methods, GWAS, eQTL.
Department of Computational Biology, University of Lausanne, Switzerland
- Nov 19-May 20 **Visiting PhD student (Systems and Population Genetics Group)**, Modelling and development of GLIMPSE for low-coverage WGS.
Mar 19-Jun 19 Department of Computational Biology, University of Lausanne, Switzerland
- Oct 15-May 20 **DPhil in Statistical and Population Genomics**, Modelling and development of IMPUTE5 method for SNP array imputation.
Department of Statistics, University of Oxford, UK
- Mar 15-Oct 15 **Research assistant**, Analysis off-lattice simulations using spatio-temporal logics.
Department of Computer Science, University of Milano-Bicocca, Italy
- Jan 14-Aug 14 **Research assistant**, Development of biological models in the Chaste environment.
Department of Computer Science, University of Oxford, UK

Publications

Journal Articles

Rubinacci, S., Ribeiro, D.M., Hofmeister, R.J. and Delaneau, O. Efficient phasing and imputation of low-coverage sequencing data using large reference panels. *Nature Genetics*, 53(1):120–126, Jan 2021.

Rubinacci, S., Delaneau, O. and Marchini, J. Genotype imputation using the positional burrows wheeler transform. *PLOS Genetics*, 16(11):e1009049, Nov 2020.

Rula, A., Palmonari, M., **Rubinacci, S.**, Ngonga Ngomo, A.C. et al. Tisco: Temporal scoping of facts. *Journal of Web Semantics*, 54:72 – 86, 2019.

Rubinacci, S., Graudenzi, A., Caravagna, G., Mauri, G. et al. Cognac: a chaste plugin for the multiscale simulation of gene regulatory networks driving the spatial dynamics of tissues and cancer. *Cancer informatics*, 14:CIN–S19965, 2015.

Submitted Papers

Gorzynski, J.E., De Jong, H.N., Amar, D., Hughes, C.R. et al. High-throughput sars-cov-2 and host genome sequencing from single nasopharyngeal swabs. *medRxiv*, 2020.

Ribeiro, D.M., **Rubinacci, S.**, Ramisch, A., Hofmeister, R.J. et al. The molecular basis, genetic control and pleiotropic effects of local gene co-expression. *bioRxiv*, 2020.

DPhil Dissertation

Rubinacci, S. *Genotype imputation methods for next generation datasets*. PhD thesis, University of Oxford, 2020.

Other Research Experience

- Jun 19 - **Research Project**, Development of a reference panel from the 100,000 Genomes Project samples and imputation of the UK Biobank dataset.
University of Oxford and Genomics England, UK
- Jul 16-Oct 16 **Research Project**, *Efficient approaches to simulating cell-based models of epithelial tissues*.
Department of Computer Science, University of Oxford, UK
- Mar 16-Jun 16 **Research Project**, *Phasing methods on large scale datasets using rare variants*.
Department of Statistics, University of Oxford, UK

Education and Training

- Dec 16-Jul 16 **Academy for PhD Training in Statistics (APTS)**.
Programme for advanced statistical studies at the University of Cambridge, University of Oxford and Durham University, UK
- Oct 15-Mar 16 **Systems Biology Centre for Doctoral Training**, <http://www.dtc.ox.ac.uk/>.
University of Oxford, UK.
- Oct 12-Mar 15 **Msc in Computer Science**, *Thesis*: Noisy Random Boolean Networks dynamics for cellular differentiation.
Department of Computer Science, University of Milano-Bicocca, Italy
- Oct 09-Sep 12 **Bsc in Computer Science**, *Thesis*: Goedel's incompleteness theorems and their computational implications.
Department of Computer Science, University of Milano-Bicocca, Italy

Teaching Experience

- Sep 20-Jan 21 **Teacher**, *Experimental design course (BSc Biology)*, Experimental Study Design and Statistical analysis.
Faculty of Biology and Medicine, University of Lausanne, Switzerland
- Jan 17-Mar 17 **Teacher**, *Statistics course*, Gibbs Sampling and Stochastic Differential Equations.
Doctoral Training Centre, University of Oxford, UK
- Oct 16-Feb 18 **Demonstrator**, *Various courses*, C++ programming and Shell scripting.
Doctoral Training Centre, University of Oxford, UK
- Sep 13-Jan 14 **Teaching Assistant**, *Mathematical Foundations of Computer Science (BSc Computer Science)*, Formal Logics and Computational Theory.
Department of Computer Science, University of Milano-Bicocca, Italy

Awards and Grants

- Aug 20 **Epstein Trainee Awards for Excellence in Human Genetics Research**, *Post-doctoral category*, Semifinalist, ASHG 2020.
- Oct 15-Sep 19 **Phd funding**, *Systems Biology DTC*, EPSRC.
- Apr 14-Jul 14 **Erasmus Placement grant**, European Union.
- Jan 14-Apr 14 **EXTRA Scholarship**, Fondazione Cariplo.