

Rodrigo Dorantes-Gilardi

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IXXI

École normale supérieure de Lyon
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France

Born: 24 April 1990

Nationality: Mexican/Spanish

Web: <https://rodogi.github.io>

Education

2016–2018	PhD 2nd-half. Under supervision of Claire Lesieur, <i>IXXI, École normale supérieure de Lyon, France</i> “Bio-mathematical aspects of the plasticity of protein folding”
2014–2016	PhD 1st-half, Under supervision of Laurent Vuillon, <i>LAMA, Le Bourget-du-Lac, France.</i> “Bio-mathematical aspects of the plasticity of protein folding”
2014	Master thesis supervised by Gelasio Salazar, <i>Universidad Autónoma de San Luis Potosí, Mexico</i> “An algorithm in python on the minium crossing number of complete graphs”.
2012–2014	Master degree in applied mathematics, <i>Universidad Autónoma de San Luis Potosí, Mexico.</i>
2008–2012	Bachelor degree in economics, <i>Université de Toulouse Capitole, France.</i>
2005–2008	High School diploma, option: General Sciences, <i>Instituto Tecnológico de Estudios Superiores de Monterrey, Mexico.</i>

Publications

Articles

2018 (Submitted)	R. Dorantes-Gilardi et al. <i>Protein Structure Plasticity: the Neighborhood Watch.</i> Nature Structural & Molecular Biology
2018 (Submitted)	R. Dorantes-Gilardi et al. <i>A Network Approach to Perturbation of Protein Structure.</i> Applied Network Science
2016 (May)	Achoch et al. <i>Protein structural robustness to mutations: an in silico investigation.</i> Phys. Chem. Chem. Phys., 18 , 13770 (2016)

Chapters

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| 2018
(Submitted) | R. Dorantes-Gilardi et al.
<i>Induced Graphs: surfing on protein structures.</i>
Allostery and protein dynamics: from physical chemistry to drug discovery
Springer <i>Methods in Molecular Biology</i> |
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Proceedings

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| 2017
(Dec) | R. Dorantes-Gilardi et al.
<i>Perturbation of amino acid networks: A statistical study of the defects introduced in proteins by mutations.</i>
The 6th International Conference on Complex Networks and Their Applications |
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Talks

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| 2016
(May) | Workshop on Mechanisms underlying local to global signals in networks
IXXI, École Normale Supérieure de Lyon, France. |
| 2016
(March) | Workshop on Advanced mathematics for network analysis
Luchon, France. |
| 2015
(June) | Workshop on protein fibers: from pathology to nanomaterial
École Normale Supérieure de Lyon, France. |
| 2015
(April) | IXXI Seminar
École Normale Supérieure de Lyon, France. |
| 2014
(December) | Theoretical Approaches for the Genome and the proteome
Bourget-du-Lac, France. |

Posters

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| 2017
(Dec) | The 6th International Conference on Complex Networks and Their Applications
Lyon, France. |
| 2015
(May) | Inter'Actions 2015
Grenoble, France. |

Conferences and Schools

2016 (April)	<i>Spring school of theoretical informatics.</i> CIRM, Marseille, France.
2016 (March)	<i>School for young researchers in mathematical informatics.</i> IMJ-PRG, Paris, France.
2015 (Jan.)	<i>School Algorithms and Heuristics for Large-scale Data Sets.</i> École Normale Supérieure de Lyon, Lyon, France.
2014 (Nov.)	<i>Lyon systems biology.</i> Ecole Normale Supérieure de Lyon, Lyon, France.

Organization

2014 (December)	Theoretical Approaches for the Genome and the proteome Bourget-du-Lac, France.
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Skills

Python	Advanced (numpy, pandas, matplotlib, networkx, biopython)
Tex	Intermediate
Elisp	Intermediate
C	basic
SQL	basic
Git	Intermediate
Linux/GNU	Intermediate
Bash (zsh)	Intermediate
HTML, CSS	Intermediate

Open Source Software

I have contributed to the following projects:

- networkx (<https://networkx.github.io/>)
- biopython (<http://biopython.org/>)

Languages

Spanish	Reading, Writing, Speaking: Native language.
English	Reading, Writing, Speaking: Fluent.
French	Reading, Writing, Speaking: Fluent.