Curriculum Vitae

Mr. Cristovão Freitas Iglesias Jr

Country of Citizenship: Brazil, Spain

Contact Information

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Degrees

2020/4 - Current	**Ph.D. in Computer Science, University of Ottawa** Supervisor: Miodrag Bolic
2017/9 - 2019/10	**M.Sc. in Informatics(Computer Networks and Distributed Systems), Federal University of Rio de Janeiro** Supervisor: Claudio Miceli de Farias Master dissertation: DOMA - An Approach to Domain Modeling of Personalized Monitoring Systems
2016/9 - 2019/11	**B.Sc. in Information Systems, Estácio de Sá University** Supervisor: Claudio Miceli de Farias Monograph: Personalized Monitoring System For Intelligent Bandwidth Control
2008/3 - 2013/3	**B.Sc. in Biophysics/Bioinformatics, Federal University of Rio de Janeiro** Supervisors: Cheng Soon Ong; Pedro Geraldo Pascutti Monograph: REDE - Interactive Online View Of Epistatic Networks.

Language Skills

Language	Read	Write	Speak	Understand
English	Yes	Yes	Yes	Yes
Portuguese	Yes	Yes	Yes	Yes
Spanish; Castilian	Yes	Yes	Yes	Yes

Prof le

Skills: Database, C++, Python, JAVA, Ruby on Rails, Javascript, Elasticsearch, Kibana, Beats, and Logstash

Areas of Research: Data Fusion, Internet of Things, Machine Learning, Software Engineering, Bioinformatics, Data Science and Data mining

Recognitions/Award

2013/10	Best work of the Unity - XXXV Giulio Massarani Journey of Scientifc Initiation, Technological, Artistic and Cultural of UFRJ - REDE: Interactive Online View Of Epistatic Networks Federal University of Rio de Janeiro Research Disciplines: Software Engineering and Bioinformatics
2013/10	Best work of the Section - XXXV Giulio Massarani Journey of Scientifc Initiation, Technological, Artistic and Cultural of UFRJ - REDE: Interactive Online View Of Epistatic Networks Federal University of Rio de Janeiro Research Disciplines: Bioinformatics
2012/10	Best work of the Section - XXXIV Giulio Massarani Journey of Scientifc Initiation, Technological, Artistic and Cultural of UFRJ - Mapping of Pro-Apoptotic BID Protein Binding Sites by Modeling and Molecular Dynamics Federal University of Rio de Janeiro Research Disciplines: Bioinformatics
2010/10	Honorable Mention - XXXII Giulio Massarani Journey of Scientifc Initiation, Technological, Artistic and Cultural of UFRJ - Structural Study of the Interaction between the Pro-apoptotic Protein BAX and Its Activators BIM, BID and PUMA Federal University of Rio de Janeiro Research Disciplines: Bioinformatics

Employment

2020/2 - current	Research Assistant | Project: AI and machine learning for development of insillico digital twin HEALTH Devices Research group (HDRG) - University of Ottawa - Canada
2019/6 - 2019/10	Web Development Professor | Project: Schedule your future with Web Development using HTML, CSS and Javascript. Mundial and Maré Bank - Brazil
2017/3 - 2019/4	Software Development Analyst | Project: Development of new functionalities for BART, SADI and OCTOPUS products using Python and Ruby on Rais. Clavis Segurança da Informação
2014/9 - 2015/3	Software Developer | Project: Development of plugins for Redmine using Ruby on Rails and PostGreSQL. EMC2-Brasil
2012/12 - 2013/3	Software Developer (Internship) | Project: Development of a visualization and analysis tool for web in the GWAS area, to work with genomic data. Project developed using JavaScript, Python, D3.js. Available in: https://github.com/chengsoonong/rede NICTA, Bioinformatics Group - Australia

2012/6 - 2012/12	JAVA Software Developer (Internship) | Project: construction of proteomic experiments Database with web interface for queries and analysis. Project developed using JAVA/J2EE, MySQL through ESB/SOA. Carlos Chagas Filho Institute of Biophysics, Federal University of Rio de Janeiro - Brazil, Genomic Unit
2012/6 - 2012/11	Software Developer (Internship) | Project: Modeling of a relational database for the study of experimental protocols used to obtain three-dimensional protein structures. Project developed using Perl and MySQL. Laboratory of Bioinformatics and Computational Biology (INCA) - Brazil
2011/3 - 2012/5	Bioinformatics Researcher (Internship) | Project: Study of the active forms of pro-apoptotic BID protein: tBID and tBID-myr by Molecular Dynamics simulations. Project developed using Python. Health Sciences Center, Federal University of Rio de Janeiro - Brazil, Modeling and Molecular Dynamics Laboratory
2011/1 - 2011/2	Bioinformatics Researcher (Internship) | Project: Study the initial steps of activation of BAX by BIM (BH3) through of normal modes analysis of the vibration (NMA) and analyze the modes consensus. Project peformed using C/C++, Python. Ecole Normale Supérieure de Cachan, Laboratoire de Biotechnologie et Pharmacologie Génétique Appliquée - France
2010/6 - 2010/11	Bioinformatics Researcher (Internship) | Project: Identification of Trypanosoma cruzi antigens from mass spectrometry and database analysis. Project developed using C/C++, Perl, Python and Data mining techniques. Health Sciences Center, Federal University of Rio de Janeiro - Brazil, Modeling and Molecular Dynamics Laboratory
2010/3 - 2010/5	Bioinformatics Researcher (Internship) | Project: Study of mutants of pro-apoptotic Bax protein through comparative modeling and Molecular Dynamics Simulation. Project developed using C/C++, Python, R and Data Mining techniques. Health Sciences Center, Federal University of Rio de Janeiro - Brazil, Modeling and Molecular Dynamics Laboratory
2009/5 - 2009/11	Bioinformatics Researcher (Internship) | Project: Study of the inhibition of the enzyme Falcipaína III, aiming the development of antimalarial drugs by Molecular Dynamics Simulation. Project developed using C/C++, Python, R and Data mining. Health Sciences Center, Federal University of Rio de Janeiro - Brazil, Modeling and Molecular Dynamics Laboratory
2009/3 - 2009/7	Bioinformatics Researcher (Internship) | Project: Inhibition of enzymes by Molecular Dynamics Simulation. Project developed using Bash script, R, Perl, Python and Data mining techniques. Health Sciences Center, Federal University of Rio de Janeiro - Brazil, Modeling and Molecular Dynamics Laboratory

Publications

Working Papers

1. First Listed Author. (Cristóvão Iglesias and Claudio Miceli). (2020). An Architectural Design Decision Model for Resilient IoT Application.

2. First Listed Author. (Cristóvão Igleisas, Samuel Pita, Claudio Miceli, Pedro Pascutti). (2020). S²FES: Smart sampling of three-dimensional structure of biological molecules from Free Energy Surface.

3. First Listed Author. (Cristóvão Igleisas and Claudio Miceli). (2020).
DOMA - An Approach to Domain Modeling of Personalized Monitoring Systems

4. First Listed Author. (Cristóvão Igleisas and Hideaki Shimazaki). (2020).
Enabling Histogram 2D and Kernel 2D Bandwidth Optimization Method applicable to large scale science with Dual Annealing and Differential Evolution algorithms.

Conference Publications

1. IGLESIAS C, Miceli C, Silva D. (2019). A Domain Model for Personalized Monitoring System Based on Context-Aware Data Fusion. IEEE Xplore® digital library. 2019 22nd International Conference on Information Fusion (FUSION)
Conference Date: 2019/7
Paper

2. Gomes Filho A, Resende C, Iglesias C, Mayworm J, Jardim M, Paiva R, Toledo R. (2017). Agile Software Development Learning through Open Hardware Project. IEEE Xplore® digital library. 2015 6th Brazilian Workshop on Agile Methods (WBMA)
Conference Date: 2015/10

Presentations

1. (2014). Software to Produce Free Energy Surfaces From Results Of Molecular Dynamics Simulation. 1a Symposium on Current Topics in Molecular Biophysics, Brazil

   Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

2. (2014). 1D and 2D histogram optimization: applied to molecular dynamics simulationresults. V Annual Meeting of the National Institute of Science andTechnology of Structural Biology and Bioimaging (INBEB), Brazil

   Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

3. (2013). REDE: Interactive Online View Of Epistatic Networks.XXXV Giulio Massarani Journey of Scientific Initiation, Technological, Artistic and Cultural of UFRJ, Brazil

   Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

4. (2013). Analysis of De-Novo Epistatic Interation Networks From WTCCC Datasets.Lorne Genome Conference, Australia

   Funding Sources: NICTA

5. (2012). Cavity Detection strategy in proapoptotic proteins surface for Drugs Planning. VI Escola de Modelagem Molecular em Sistemas Biológicos, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

6. (2012). Mapping of Pockets in Pro-Apoptotic Proteins tBID, and tBID-myr for Drug Design Against Parkinson's Disease.XXXVII Brazilian Biophysical Society Congress, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

7. (2012). Mapping of Pro-Apoptotic BID Protein Binding Sites by Modeling and Molecular Dynamics.XXXIV Giulio Massarani Journey of Scientific Initiation, Technological, Artistic and Cultural of UFRJ, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

8. (2011). Molecular Dynamics Simulation of BID Apoptosis Regulating Protein after N-terminal Cleavage Activation and Myristoylation.Semana de Pós-Graduação de Bioquímica Médica, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

9. (2011). Study of Activation of Pro-Apoptotic Proteins Through Molecular Dynamics and Analysis of Normal Low Frequency Vibration Modes.XXXIII Giulio Massarani Journey of Scientific Initiation, Technological, Artistic and Cultural of UFRJ, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)

10. (2010). Structural Study of the Interaction between the Pro-apoptotic Protein BAX and Its Activators BIM, BID and PUMA. XXXII Giulio Massarani Journey of Scientific Initiation, Technological, Artistic and Cultural of UFRJ, Brazil

    Funding Sources: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Brazil)