

PEDRO LOPES

[Birthdate: 1985-10-13]

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EXPERIENCE

PhD Scholarship

- ▶ **Location:** IEETA, University of Aveiro
- ▶ **Supervisor:** José Luís Oliveira
- ▶ **Date:** August 2008 > [ongoing – expected July 2012]

International Internship

- ▶ **Location:** Department of Genetics, University of Leicester
- ▶ **Supervisor:** Anthony Brookes
- ▶ **Date:** August 2010 > October 2010
- ▶ **Scholarship:** awarded by the Erasmus program

Research & Development

- ▶ **Location:** University of Aveiro Bioinformatics & Computational Biology Group, IEETA
- ▶ **Supervision:** José Luís Oliveira
- ▶ **Date:** August 2007 > [ongoing]

Teaching

- ▶ **Location:** Electronics, Telecommunications and Informatics Department, University of Aveiro
 - **Course:** Programming 3 [Object-Oriented Programming, Java] - 2011 > 2012
 - **Course:** Information Technologies for Health [ICT, Word, Excel] - 2011 > 2012
 - **Course:** Programming 2 [Data Structures and Algorithms, Java] - 2010 > 2011, 2011 > 2012

EDUCATION

PhD, Doctoral Program in Informatics Engineering 2008 > [ongoing, expected July 2012]

Title: Service Composition in Biomedical Applications

- ▶ **Supervisor:** José Luís Oliveira

MSc, Computers and Telematics Engineering 2003 > 2008

Title: Service Integration for Knowledge Extraction

- ▶ **Supervisor:** José Luís Oliveira

SCIENCE

Publications on Journals

- ▶ Sara C. Novais, Tine Vandenbrouck, Pedro Lopes, Joel Arrais, Wim De Coen, Amadeu M.V.M. Soares and Mónica J.B. Amorim; *Enchytraeus albidus* microarray: enrichment, design, annotation and database (EnchyBASE) in PLoS ONE, March 2012
- ▶ A Bauher-Mehren, EM van Mulligen, P Avillach, MC Carrascosa, B Singh, R Garcia-Serna, Pedro Lopes, José Luís Oliveira, G Diallo, J Mestres, E Ahlberg Helgee, S Boyer, F Sanz, JA Kors, LI Furlong; *Automatic filtering and substantiation of drug safety signals* in

- ▶ Nuno Rosa, Maria José Correia, Joel P. Arrais, Pedro Lopes, José Melo, José Luís Oliveira and Marlene Barros; *From the salivary proteome to the OralOme: Comprehensive molecular oral biology* in Archives of Oral Biology, January 2012 [<http://dx.doi.org/10.1016/j.archoralbio.2011.12.010>]
- ▶ Priscilla Grynberg, Thomas Abeel, Pedro Lopes, Geoff Macintyre and Lorena Pantano Rubino; *Highlights from the Student Council Symposium 2011 at the International Conference on Intelligent Systems for Molecular Biology and European Conference on Computational Biology* in BMC Bioinformatics, 12(Suppl 11):A1; November 2011 [<http://dx.doi.org/10.1186/1471-2105-12-S11-A1>]
- ▶ Pedro Lopes, Raymond Dagleish and José Luís Oliveira; *WAVE: Web Analysis of the Variome* in Human Mutation, 32: 729–734; March 2011 [<http://dx.doi.org/10.1002/humu.21499>]

Publications with Oral Communication

- ▶ Pedro Lopes, Rafael Mendonça, Hugo Rocha, Jorge Oliveira, Laura Vilarinho, Rosário Santos and José Luís Oliveira; *A Rare Disease Patient Manager* in 6th International Conference on Practical Applications of Computational Biology & Bioinformatics, Salamanca, Spain; March 2012 [http://dx.doi.org/10.1007/978-3-642-28839-5_20]
- ▶ José Melo, Joel P. Arrais, Pedro Lopes, Nuno Rosa, Maria José Correia, Marlene Barros and José Luís Oliveira; *Web Information System for the Study of Oral Health* in International Conference on Health Informatics 2012 (HEALTHINF 2012), Vilamoura, Portugal; February 2012 [<http://dx.doi.org/10.5220/0003785300970105>]
- ▶ Pedro Lopes and José Luís Oliveira; *COEUS: A Semantic Web Application Framework* in 4th International Semantic Web Applications & Tools for Life Sciences Workshop (SWAT4LS 2011), London, England; December 2011
- ▶ Pedro Lopes and José Luís Oliveira; *A semantic web application framework for health systems interoperability* in First International Workshop on Managing Interoperability and Complexity in Health Systems (MIX-HS'11), Glasgow, Scotland; November 2011 [<http://dx.doi.org/10.1145/2064747.2064768>]
- ▶ Joel P. Arrais, Pedro Lopes and José Luís Oliveira; *Challenges Storing and Representing Biomedical Data* in Information Quality in e-Health - 7th Conference of the Workgroup Human-Computer Interaction and Usability Engineering of the Austrian Computer Society (USAB 2011), Graz, Austria; November 2011 [http://dx.doi.org/10.1007/978-3-642-25364-5_6]
- ▶ Pedro Lopes and José Luís Oliveira; *Towards Knowledge Federation in Biomedical Applications* in 7th International Conference on Semantic Systems (I-SEMANTICS 2011), Graz, Austria; October 2011 [<http://dx.doi.org/10.1145/2063518.2063530>]
- ▶ Pedro Lopes and José Luís Oliveira; *An Integrated View for the Human Variome* in 14th Annual Meeting of Portuguese Society for Human Genetics (SPGH 2010); Coimbra, Portugal; November 2010
- ▶ Pedro Lopes, David Campos and José Luís Oliveira; *A tagging system for bioinformatics resources* in 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010); Corfu, Greece, November 2010
- ▶ Pedro Lopes and José Luís Oliveira; *An extensible platform for variome data integration* in 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB 2010); Corfu, Greece, November 2010
- ▶ Pedro Lopes and José Luís Oliveira; *A Holistic Approach for Integrating Genomic Variation Information* in 10th Spanish Symposium on Bioinformatics (JBI2010); Malaga, Spain, October 2010
- ▶ Joel Arrais, João Pereira, Pedro Lopes, Sérgio Matos, and José Luís Oliveira; *Improving cross mapping in biomedical databases* in 4th International Workshop on Practical Applications of Computational Biology and Bioinformatics (IWPACBB 2010); Guimarães, Portugal, June 2010
- ▶ Pedro Lopes, Joel Arrais and José Luís Oliveira; *DynamicFlow: A Client-side Workflow Management System* in 3rd International Workshop on Practical Applications of Computational Biology and Bioinformatics (IWPACBB2009), Springer; Salamanca, Spain, June 2009 [http://dx.doi.org/10.1007/978-3-642-02481-8_167]
- ▶ Pedro Lopes, Joel Arrais and José Luís Oliveira; *Dynamic Service Integration using Web-based Workflows*; 10th International Conference on Information Integration and Web Applications & Services, ACM; Linz, Austria, November 2008 [<http://doi.acm.org/10.1145/1497308.1497426>]

Publications with Poster Presentation

- ▶ Rafael Mendonça, Pedro Lopes and José Luís Oliveira; *Gathering and Managing Genotype and Phenotype Information About Rare Disease Patients* in International Conference on Health Informatics 2012 (HEALTHINF 2012), Vilamoura, Portugal; February 2012
- ▶ Pedro Lopes and José Luís Oliveira; *An Integrated View for Human Variome Information* in 14th International Conference on Research in Computational Molecular Biology (RECOMB2010); Lisbon, Portugal, August 2010
- ▶ Pedro Lopes and José Luís Oliveira; *Integration of Variome Data through a Link Discovery Strategy* in IX Jornadas de Bioinformática (IX JBI); Lisbon, Portugal, November 2009
- ▶ Pedro Lopes, David Campos, Carlos Davide Pinto and José Luís Oliveira; *Arabella: A Topic Driven Web Crawler* in International Conference on Knowledge Discovery and Information Retrieval, Institute for Systems and Technologies of Information, Control and

Communication (KDIR, IC3K 2009); Madeira, Portugal, October 2009

- ▶ Pedro Lopes, Joel Arrais and José Luís Oliveira; *LinkIntegrator: A Link-based Data Integration Architecture in International Conference on Knowledge Discovery and Information Retrieval*, Institute for Systems and Technologies of Information, Control and Communication (KDIR, IC3K 2009); Madeira, Portugal, October 2009

Invited Talks

- ▶ *Experiences and Dialogues in Portuguese Bioinformatics Education in Bioinformatics Open Days*; Braga, Portugal; March 2012
- ▶ *Collecting and Enriching Human Variome Datasets in 3rd Annual Meeting of Redes CYTED NanoRoadmap e Ibero-NBIC*; Aveiro, Portugal; October 2011
- ▶ *GEN2PHEN Project Introduction in 14th Annual Meeting of Portuguese Society for Human Genetics (SPGH 2010)*; Coimbra, Portugal; November 2010
- ▶ *EU-ADR Project and Taverna at School of Computer Science, University of Manchester*; Manchester, United Kingdom, October 2010

Cooperation in Research Projects

- ▶ **Genotype to Phenotype Databases: A Holistic Solution** [GEN2PHEN – FP7(2007-2013) ICT-200754]
 - Project Management, Software Development [Partner UAVR]; *Diseasecard* - <http://bioinformatics.ua.pt/dc4>, *WAVE* - <http://bioinformatics.ua.pt/WAVE>, *COEUS* - <http://bioinformatics.ua.pt/coeus>
- ▶ **Early Detection of Adverse Drug Events by Integrative Mining of Clinical Records and Biomedical Knowledge** [EU-ADR – FP7(2007-2013) ICT-215847]
 - Project Management, Interoperability Coordination [Partner UAVR]; *EU-ADR Web Platform* - <http://bioinformatics.ua.pt/euadr>

Cooperation in Student Supervision

- ▶ MSc in Computers and Telematics Engineering
 - *OralCard: Web Information System for Oral Health*, José Melo, University of Aveiro, 2010 > 2011
 - *Information System for Rare Diseases and Genetics Mutations*, Rafael Mendonça, University of Aveiro, 2010 > 2011
 - *Biomedical Wikifier*; Emanuel Matos, University of Aveiro, 2009 > 2010

SKILLS

Computer Science

- ▶ **Programming**
 - Object Oriented Programming [Java, C#], Algorithms [Java, C#, C], Workflow Management & Enactment
- ▶ **Development**
 - Information systems [Java, C#, PHP, SQL, XML/XSD/XPath, JSON], User interaction [HTML, JavaScript, CSS], Service composition [REST, SOAP], Semantic Web [OWL, RDF, SPARQL], LinkedData
- ▶ **Software Engineering**
 - Requirements Analysis, System Modeling [UML], Project Planning and Management
- ▶ **Bioinformatics and computational biology**
 - Data Integration, Knowledge Extraction & Management, Service Composition

Non-Profit Organizations

- ▶ International Society for Computational Biology Student Council Regional Student Group Portugal
 - President [2011 > 2012], Founder and President [2010 > 2011]

- ▶ Association for Electronics, Telecommunications and Telematics of the University of Aveiro [AETTUA]
 - Financial Board Reporter [2008 > 2009], Direction Vice-President [2007 > 2008], General Assembly Secretary [2006 > 2007]

Event Organization

- ▶ European Student Council Symposium 2012
 - Event Chair: Basel, Switzerland; September 2012
- ▶ International School on Semantic Web Applications & Technologies for Life Sciences 2012
 - Event Chair: Aveiro, Portugal; May 2012
- ▶ International Society for Computational Biology Student Council Symposium 2011
 - Event Co-Chair: Vienna, Austria; July 2011
- ▶ North Africa, Portugal and Spain Student Symposium on Bioinformatics 2010
 - Event Co-Chair: Málaga, Spain; October 2010

Miscellaneous

- ▶ Driver's license
 - B Category [Portugal]