

Selan Rodrigues dos Santos

Assistant Professor



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Personal Profile

I am an assistant professor in the Department of Informatics and Applied Mathematics (DIMAp) at the Federal University of Rio Grande do Norte (UFRN). In 2004 I received my Ph.D. degree from the School of Computing, University of Leeds, sponsored by CAPES, the Brazilian Ministry of Education Agency.

Formal Education

- 2012 - 2012** Pos-doc / Sabbatical Leave
Four Eyes Lab, UCSB, Santa Barbara, CA, USA.
- 2000 - 2004** Phd In Computing.
School of Computing, University of Leeds, ULEEDS, UK.
- 1994 - 1996** MSc in Computer Science (Mestrado em Informática).
Dep. de Informática, PUC-Rio, Rio de Janeiro, RJ, Brazil.
- 1990 - 1993** BSc in Computer Science (Bacharelado em Ciência da Computação).
Dep. de Computação, UFC, Fortaleza, CE, Brazil.

Professional Activities (last five years)

- 2006 - today** Universidade Federal do Rio Grande do Norte - UFRN - Brazil.
Assistant Professor (tenured position, or Maître de Conférences).

Awards and Grants

- 2011** Best full paper award, XIII Brazilian Symposium on Virtual and Augmented Reality, SVR 2011, SBC
- 2009** Best full paper award, XI Brazilian Symposium on Virtual and Augmented Reality, SVR 2009, SBC.
- 2010-2012** Research grant. CNPq, Brazil, level 2 (similar to the French « prime d'excellence scientifique »).

Languages

Portuguese (native), English (fluent), and Spanish (functional).

Journal papers (last five years)

- Medeiros, Joao Paulo S.; Brito Jr., Agostinho M.; Pires, Paulo S. Motta; dos Santos, S. R. *Advances in network topology security visualisation*. International Journal of System of Systems Engineering (IJSSE). , v.1, p.387 - , 2009.
- Malfatti, Silvano; dos Santos, S. R.; Fraga, L. M.; Oliveira, Jauvane C.; Justel, C. *The Design of a Graphics Engine for the Development of Virtual Reality Applications*. Revista de Informática Teórica e Aplicada. , v.XV, p.26 - 45, 2008.



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- dos Santos, S. R.; Brodlié, K. W. *Gaining understanding of multivariate and multidimensional data through visualization*. Computers & Graphics. , v.28, p.311 - 325, 2004.
- dos Santos, S. R.; Fraga, L. S. *Using a Multi-User Desktop-Based Virtual Reality System to Recreate the Sao Miguel das Missoes Ruins*. Cyberpsychology & Behavior. , v.5, p.471 - 479, 2002

Books & book chapters

- Oliveira, J. C., dos Santos, S. R. ; Carvalho, B. M., Machado, L. dos S., Moraes, R. M., Costa, R. M. E. M., Werneck, V. M. B., Pinho, M. S., Marques, F. L. S. N., Pedrinil, H., Rodello, I., Delamaro, M. E., Tori, R. . *Virtual Reality Applied to Medicine*. In: Raúl Feijóo; Artur Ziviani; Pablo J. Blanco. (Org.). *Scientific Computing Applied to Medicine and Healthcare*. Scientific Computing Applied to Medicine and Healthcare. 11ed.Petrópolis: INCT-MACC, 2012, v. 1, p. 276-314.
- dos Santos, S. R., Coutinho, E. A. G. *Introduction to Information Technologies* (Introdução às Tecnologias da Informação). Natal: EDUFRN, 2010, v.1. p. 150.
- dos Santos, S. R., Coutinho, E. A. G., Duarte, P.M. *Chapter 1: Developing Android Applications in "Techniques and tendencies in augmented and virtual reality"*, Brega, J.R.F. and Siscoutto, R. (eds), Porto Alegre, Brazil, 2011, v1 155 p.

Full Conference Papers (with referees, last five years)

- Souza, A. M. de C., dos Santos, S. R. *Handcopter Game: A video-tracking based serious game for the treatment of patients suffering from body paralysis caused by a stroke* In: Proceedings of the XIV Brazilian Symposium on Virtual Reality (SVR2012), Niterói, Brazil, Sociedade Brasileira de Computação, 2012, v.1. p. 201-209.
- dos Santos, S. R., Duarte, P.M. *Supporting Search Navigation by Controlled Camera Animation* In: Proceedings of the XIII Brazilian Symposium on Virtual Reality (SVR2011), Uberlândia, Brazil, Sociedade Brasileira de Computação, 2011, v.1. p. 207-216.
- Gadelha, M. A., dos Santos, S. R. *Controle de Navegação em Ambientes Virtuais 3D através do Rastreamento de Objetos (Navigation Control in 3D Virtual Environments based on Object Tracking)* In: Proceedings of the VII Virtual and Augmented Reality Workshop 2010 (WRVA 2010), 2010, São Paulo: Universidade Presbiteriana Mackenzie, 2010. v.1. p.1 - 6.
- Souza, A. M. de C., dos Santos, S. R. *Estudo Comparativo sobre a Percepção de Pistas Sonoras em Ambientes Virtuais (A Comparative Study on the use of Sound Cues in Virtual Environments)* In: Proceedings of the VII Virtual and Augmented Reality Workshop 2010 (WRVA 2010), 2010, São Paulo: Universidade Presbiteriana Mackenzie, 2010. v.1. p.7 - 12.
- Malfatti, S., dos Santos, F. F., dos Santos, S. R. *Using Mobile Phones to Control Desktop Multiplayer Games* In: Proceedings of the IX Brazilian Symposium on



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Computer Games and Digital Entertainment, 2010, Florianópolis: SBC, 2010. v.1. p. 212 - 218.

- dos Santos, S. R., Silva, B. M. F., Oliveira, J. C. *Camera Control Based on Rigid Body Dynamics for Virtual Environments*. In: Proceedings of the IEEE International Conference on Virtual Environments, Human-Computer Interfaces, and Measurement Systems, VECIMS 2009, Hong Kong. London: IEEE publishers, 2009. v.1. p.344 - 349.
- dos Santos, S. R., Bezerra, L., Feitosa Neto, A. A., Malfatti, Silvano. *FAITH: A Desktop Virtual Reality System for Fingerspelling* In: Proceedings of the XI Symposium on Virtual and Augmented Reality, SVR 2009, Porto Alegre: SBC, 2009. v.1. p.189 - 198.
- Silva, B. M. F., dos Santos, S. R., Oliveira, J. C. *Using a Physically-based Camera to Control Travel in Virtual Environments*. In: Proceedings of the XI Symposium on Virtual and Augmented Reality, SVR 2009, Porto Alegre: SBC, 2009. v.1. p.146 - 156.
- Medeiros, J. P. S., dos Santos, S. R. *RadialNet: An Interactive Network Topology Visualization Tool with Visual Auditing Support* In: Critical Information Infrastructure Security, 2009, Rome. Lecture Notes in Computer Science. Heidelberg: Springer Berlin, 2009. v.5508. p.168 - 179 (I: 10.1007/978-3-642-03552-4_15).
- Malfatti, S. M., dos Santos, S. R., Fraga, L. M., Justel, C., Oliveira, J. C. *EnCIMA: A Graphics Engine for the Development of Multimedia and Virtual Reality Applications*. In: Proceedings of the X Symposium on Virtual and Augmented Reality, SVR 2008, 2008, João Pessoa, PB.SBC, 2008. p.313 - 321
- dos Santos, Fraga, L. M., P. Trenhago, Malfatti, Silvano, Oliveira, Jauvane C. *Using a Rendering Engine to Support the Development of Immersive Virtual Reality Applications*. In: Proceedings of the VECIMS 2008 IEEE Internal Conference on Virtual Environments, Human-Computer Interfaces, and Measurement Systems, 2008, Istanbul, Turquia. Piscataway, NJ 08855-1331 USA: IEEE Press, 2008. p.74 - 79.

Student Supervision

- 3 PhD students supervised at PPgSC/UFRN.
- 7 MSc. students supervised at PPgSC/UFRN.
- 14 BSc. students supervised at DIMAp/UFRN and URI.

Other Information

- Coordinator of 8 research projects (2 on going and 7 finished) sponsored by Brazilian research & education agencies.
- Participation in over a dozen Conference Programme Committees.
- General chair of two scientific conferences: SVR2010 - XII Symposium on Virtual and Augmented Reality 2010 and XI WIM - Workshop of Informatics in Medicine.
- Program chair of the SVR2013 - XV Symposium on Virtual and Augmented Reality 2013.