

José Jair Santanna

Ph.D. Researcher, Lecturer, Network Security Specialist & (Big) Data Analyst

Contact

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Languages

portuguese native
english fluency
spanish comprehension
dutch comprehension

Programming

Bash, Python, C#, SQL
PIG, Spark & Impala

Professional Objective

A research & development position with focus on network security and the use of big data technologies to improve network data analysis. A position where I can transfer my enthusiasm, knowledge, skills and experience into meaningful innovation that improve the security in computer networks, specially in the Internet.

Education

- 2013–Now **Doctor** University of Twente, The Netherlands
"The DDoS as a Service Phenomenon"
- 2010–2012 **Master** in Computer Science Federal University of Rio Grande do Sul, Brazil
"A BPM-based Solution for Inter-domain Circuit Management". The outcome of this work generated a product still in use by the Brazilian National Education and Research Network (RNP) (Link: <http://meican.cipo.rnp.br/>)
- 2005–2010 **Bachelor** in Computer Engineer Federal University of Pará, Brazil
"A Comparative Evaluation of DCCP Protocol in a Experimental Mesh Network."

Experience

Technical Adviser

- 2016 **To the Dutch National Cyber Security Center and the Scientific Research & Documentation Center** The Netherlands
For the production of a yearly report on "Cyber metrics 2016: DDoS and Malware" requested by the Dutch Ministry of Justice.
- 2016 **To the Yokohama National University** Japan
For the production of a report about "Reflection & Amplification DDoS attacks" requested by the Japanese Ministry of Internal Affairs and Communications.

Assistant Professor

- 2012–2013 **University of Santa Cruz do Sul (UNISC)** Santa Cruz do Sul, Brazil
Tasks & Responsibilities: Supervise students and teach the following courses: Computer Networks, Computer Network Management, and Digital Systems.

Guest Lecturer

- 2015 & 2016 **Product Design to Online Business (course)** University of Twente, The Netherlands
Audience: bachelor students of industrial engineering and business information technology.
- 2015 **Network Security (course)** University of Twente, The Netherlands
Audience: master and bachelor students of computer science, electrical engineer, and telematics from the University of Twente, 3TU cyber security, and members of ICT labs.
- 2015 **Cybercrime & Cybersecurity (minor)** University of Twente, The Netherlands
Audience: bachelor students from University of Twente, European Research Center for Information (ERCIS), Westfälische Wilhelms - Universität Münster, Universität Innsbruck, and University of Leicester.

Software Developer

- 2015–Now **Distributed Denial of Service Attacks Database (DDoSDB)**
Link: http://bit.ly/ddos_db
An initiative to develop the largest open database with DDoS attacks.
Languages: Python, Bash, Pig Latin & Apache Impala
- 2010–2011 **Management Environment of Inter-domain Circuits for Advanced Networks (MEICAN)**
Link: <http://meican.cipo.rnp.br/>
Development of an Executable Network Management Policies Editor sponsored by the Brazilian National Education and Research Network (RNP)
Language: WS-BPEL
- 2009 **Support for Planning Sustainable Electrical Power Generation via Vegetable Oil.**
Desktop application sponsored by Eletronorte, subsidiary of the major Brazilian power utility (Eletrobrás).
Language: C#.Net & MySQL

Student Supervisor

- [M.Sc. Degree] **Joey de Vries [Cum Laude], Justyna Chromik [Cum Laude], Wouter de Vries, Mark Wierbosch, and Jarmo van Lenthe.**
- [B.Sc. Degree] **Roeland Krak, Max Kerkers, Dirk Maan, Jochum Börger, and Guilherme Dressler.**

International Conference Reviewer

IFIP Networking (2014–2016), IEEE/IFIP Network Operations and Management Symposium (2014 & 2016), Asia-Pacific Network Operations and Management Symposium (2013 & 2014), IFIP/IEEE Integrated Management (2015), International Conference on Autonomous Infrastructure, Management and Security (2015), International Conference on Network and Service Management (2013– 2015), EUNICE Conference (2013) & IEEE Symposium on Computers and Communications(2011)

Awards

- 2015 **Best Ph.D. 'Elevator Pitch' (1st Place)** CTIT Symposium, University of Twente
- 2015 **Best Poster (3rd Place)** CTIT Symposium, University of Twente
- 2015 **Best Paper Award** Autonomous Infrastructure, Management and Security Conference
- 2015 **Top Papers Nomination** Brazilian Symposium on Computer Networks and Distributed Systems
- 2010 **Student Award (3rd Place)** Computer Engineer, Federal University of Pará, Brazil

Communication Skills

More than 30 presentations in the last 3 years (see in: <http://www.slideshare.net/jjcsantanna>), among those I highlight:

- 2015 **Oral Presentation** at Logius (part of the Dutch Ministry of the Interior and Kingdom Relations).
- 2015 **Oral Presentation** to the Dutch National Management Organization of Internet Providers (NBIP).
- 2015 **Oral Presentation** to the Dutch National Cyber Security Centrum (NCSC).
- 2013 & 2015 **Oral Presentation** at the 31th and 36th IRTF Network Management Research Group (NMRG).

Scientific Appendix

Description of Ph.D. Research Publications