José Jair Santanna

Enthusiastic, Teacher, Researcher, Network Security Specialist & (Big) Data Analyst

Contact

University of Twente
DACS research group
Drienerlolaan 5
7522 NB Enschede
The Netherlands

j.j.santanna@utwente.nl
+31 53 4892505

More Information

jairsantanna.com

/TxcQNxUAAAAJ

/0...2-8361-6729

/K-2169-2016

/jjcsantanna

/jjcsantanna

/jjsantanna

Languages

Dutch★★☆☆☆
Spanish★★★☆☆
English★★★★★
Portuguese★★★★★

Professional Objective

I am currently a PhD candidate at University of Twente with already a postdoctoral contract starting right after I achieve the Doctor degree (march 2017). My research is founded by the European commission and by the Dutch national Organisation for Scientific Research (NWO). Some results of my PhD research has already achieved recognition in the national and international level, for example I had the opportunity to advise both the Japanese Ministry of Internal Affairs and Communications and the Dutch National Cyber Security Center on the topic of cyber security.

My professional objective is to become a recognized researcher and professor in network management and security. On top of that I am eager to make my name and the name of the academic institution that I am part of as a worldwide reference in cyber security. I aim to transfer my enthusiasm, knowledge, skills and experience into meaningful innovation to improve the security in all types of networks, specially in the Internet.

Education

2013–mar/2017* Doctor in Computer Science — University of Twente, The Netherlands
"The DDoS as a $ervice Phenomenon".
This ongoing work have being used by both the security community and by network operators. One of the outcomes that stands out is publicly available at 'booterblacklist.com' and was already downloaded by more than four hundred users worldwide.
Supervisor: Prof. Dr. Ir. Aiko Pras

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 is still in production used by the Brazilian National Education and Research Network (Link: http://meican.cipo.rnp.br/).
Supervisor: Prof. Dr. Lisandro Zambenedetti Granville

2005–2010 Bachelor in Computer Engineer — Federal University of Pará, Brazil
"A Comparative Evaluation of DCCP Protocol in Mesh Networks."
Supervisor: Dr. Kelvin Lopes Dias

Experience

Technical Adviser

2016 To the Yokohama National University — Japan
For the production of a report on "Reflection & Amplification DDoS attacks" requested by the *Japanese Ministry of Internal Affairs and Communications*.

2016 To the Dutch National Cyber Security Center and the Scientific Research & Documentation Center — The Netherlands
For the production of a report on "Cyber metrics 2016: DDoS and Malware" requested by the *Dutch Ministry of Security and Justice*.

Assistant Professor

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

Guest Lecturer

2016	**Network Management**	University of Twente, The Netherlands

Title: SNMPv1, v2, v3 and Beyond (a very practical lecture)
Audience: master students of computer science, electrical engineer, and telematics from the University of Twente.

2016	**Network Management**	University of Twente, The Netherlands

Title: Network management based on WebServices
Audience: master students of computer science, electrical engineer, and telematics from the University of Twente.

2015 & 2016	**Product Design to Online Business**	University of Twente, The Netherlands

Audience: bachelor students of industrial engineering and business information technology.

2015	**Network Security**	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 - Univerität Münster, Universität Innsbruck, and University of Leicester.

Student Supervisor

Among 10 supervised students: 5 decided to follow towards the next academic degree[*], PhD or MSc, 2 received the MSc degree cum laude[+], 2 won the best paper award in international conferences[#], and 1 won the second place of a renowned Dutch national prize (KIVI/Defensie & Veiligheid) for her thesis[!].

[M.Sc. Degree] **Justyna Chromik[* + # !] , Wouter de Vries[* #], Joey 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

Among more than 20 venues acting as reviewer we highlight four conferences which are the top well ranked related to the Committee on Network Operation and Management (CNOM), which is a renowned technical committee part of the IEEE Communications Society. For each conference we present the acronym, the full name, the acceptance rate which is the number of papers submitted divided by published* (according `www.cs.ucsb.edu/~almeroth`), and the h-index* (according Google scholar). For the entire list of conference that I was reviewer you can check my records on the known conference management systems, i.e., EDAS [link], JEMS [link], and EasyChair [link].

CNSM	**International Conference on Network and Service Management**	17.6% | 18
NETWORKING	**IFIP Networking**	23.8% | 22
IM	**IFIP/IEEE Integrated Management**	27.2% | 18
NOMS	**IEEE/IFIP Network Operations and Management Symposium**	28.9% | 22

---

*last checked: April 7,2016

Conference Organizer

2016	**Shadow Technical Program Committee (TPC)**	CNSM

IFIP/IEEE International Conference on Network and Service Management (CNSM) is the premier annual single-track conference in the general area of network and service management. A shadow TPC is a experimental initiative to make PhD researchers better TPCs in the future. The reviews are considered as normal a TPC review.

2013-2016	**Technical Program Committee (TPC)**	ERRC

Escola Regional de Redes de Computadores, a conference for undergrad students from the south of Brazil.

2012	**Local Organizing Committee**	LatinCloud

IEEE Latin American Conference on Cloud Computing and Communications

2010	**Local Organizing Committee**	SBRC

The Brazilian Symposium on Computer Networks and Distributed Systems.

Software Developer

2015–Now **Distributed Denial of Service Attacks Database (DDoSDB)**
Link: http://www.ddosdb.org
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 part of a Ph.D. thesis [link] sponsored by a subsidiary (Eletronorte) of the major Brazilian power utility (Eletrobrás).
Language: C#.Net & mySQL

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

Presentations

More than 30 presentations in the last 3 years (available on my slideshare.net/jjcsantanna), among those I highlight:

2015   **Invited presentation** at Logius (part of the Dutch Ministry of the Interior and Kingdom Relations).

2015   **Invited Presentation** to the Dutch National Management Organization of Internet Providers (NBIP).

2015   **Invited Presentation** to the Dutch National Cyber Security Centrum (NCSC).

2013 & 2015 **Presentation** at the 31th and 36th IRTF Network Management Research Group (NMRG).

Capacity to Stablish Collaboration

`Booking.com`, `NationaleBeheersorganisatieInternetProviders(NBIP)`, `fox-it.com`, `quarantain` `SURFNet`, `CESNET`, `RIPENCC`

Scientific Appendix
Publications