Jonatas Marques

Education

- 2017–2022 **Ph.D. in Computer Science**, Federal University of Rio Grande do Sul (UFRGS), Brazil. Advisor: Luciano Paschoal Gaspary.
- Sep, 2019–Jul, 2020 **Visiting Scholar**, *University of Illinois at Urbana-Champaign*, USA. Advisor: Kirill Levchenko.
 - 2015–2017 **M.Sc. in Applied Computing**, *Santa Catarina State University (UDESC)*, Brazil. Advisor: Rafael Rodrigues Obelheiro.
 - 2011-2015 **B.Sc. in Computer Science**, Santa Catarina State University (UDESC), Brazil. With honors. Advisor: Rafael Rodrigues Obelheiro.

Honors and Awards

- 2022 **Ph.D. Graduation with Honors**, Federal University of Rio Grande do Sul (UFRGS), Brazil.
- 2019 **Best Student Paper Award**, *IFIP/IEEE International Symposium on Integrated Network Management (IM 2019)*, along with Ângelo Lapolli and advised by Luciano Paschoal Gaspary.
- 2018 **Best Paper Award**, Brazilian Symposium on Computer Networks and Distributed Systems (SBRC), advised by Luciano Paschoal Gaspary.
- 2015 **B.Sc. Graduation with Honors**, Santa Catarina State University (UDESC), Brazil.
- 2013 **Honorable Mention**, Brazilian Final of the International Computer Programming Contest (ICPC) of the Association for Computing Machinery (ACM), along with team members Ramon Oliveira and Tárliton Godoy.

Experience

- 2021-Now Research Project Member, SkyNet: Towards Smart Data Planes.
- 2021–2022 **Substitute Teacher**, *Introduction to Programming*, Federal University of Rio Grande do Sul (UFRGS).
- 2017–2022 **Student to Student Peer Mentoring**, Federal University of Rio Grande do Sul (UFRGS). Peer mentoring of four M.Sc. students.
- 2017–2020 **Research Project Member**, *P4Sec: Securing Networks in the Programmable Data Plane Era.*
- Mar, 2018–Nov, 2018 **Undergraduate Final Project Advising**, Federal University of Rio Grande do Sul (UFRGS).
 - Co-advisor to an undergraduate student's final project.
- Aug, 2017–Dec, 2017 **Teaching Assistance**, *Programming Challenges*, Federal University of Rio Grande do Sul (UFRGS).

 Graduate TA in the Programming Challenges course in the Computer Science program.
- Mar, 2017–Jul, 2017 **Teaching Assistance**, *Communication Protocols*, Federal University of Rio Grande do Sul (UFRGS).

Graduate TA in the Communication Protocols course in the Computer Science program.

- Sep, 2016 **Tutoring**, *Data Analysis with Python*, Santa Catarina State University (UDESC). Instructor in a one-day tutorial on data analysis with Python, Pandas, Numpy, Matplotlib, and Jupyter Notebooks.
- Mar, 2016–Jul, 2016 **Teaching Assistance**, *Operating Systems*, Santa Catarina State University (UDESC). Graduate teaching assistant in the Operating Systems course in the Computer Science program.
- Dec, 2013–Nov, 2014 **Student Body Representation**, *Department of Computer Science*, Santa Catarina State University (UDESC).

 Representative of the student body of the Department of Computer Science at regular department
 - Sep, 2013 **Tutoring**, *Introduction to Programming Contests*, Santa Catarina State University (UDESC).
 - Instructor in a three-day tutorial on programming contests.
- Aug, 2013–Jul, 2014 **Teaching assistance**, *Data Structures Course*, Santa Catarina State University (UDESC). Undergraduate TA in the Data Structures course in the Computer Science program.
- Aug, 2012–Dec, 2012 **Undergraduate Research**, *Geographic Information Systems*, Santa Catarina State University (UDESC).

 Undergraduate research for the development of a geographic information system.

Selected Publications

- 2020 MARQUES, JONATAS ADILSON; LEVCHENKO, KIRILL; GASPARY, LUCIANO PASCHOAL. *IntSight: Diagnosing SLO Violations with In-Band Network Telemetry.* ACM International Conference on emerging Networking Experiments and Technologies (CoNEXT 2020), 2020, Barcelona, Spain.
- 2019 MARQUES, JONATAS ADILSON; LUIZELLI, MARCELO CAGGIANI; TAVARES DA COSTA FILHO, ROBERTO IRAJÁ; GASPARY, LUCIANO PASCHOAL. *An optimization-based approach for efficient network monitoring using in-band network telemetry.* Journal of Internet Services and Applications, v. 10, p. 12, 2019.
- 2019 LAPOLLI, ÂNGELO; **MARQUES, JONATAS ADILSON**; GASPARY, LUCIANO PASCHOAL. *Offloading Real-time DDoS Attack Detection to Programmable Data Planes.* IFIP/IEEE International Symposium on Integrated Network Management (IM 2019), 2019, Arlington, VA, USA. *Best Student Paper Award.*
- 2018 MARQUES, JONATAS ADILSON; GASPARY, LUCIANO PASCHOAL. *Explorando Estratégias de Orquestração de Telemetria em Planos de Dados Programáveis.* Proceedings of XXXVI Brazilian Symposium on Computer Network and Distributed Systems (SBRC), 2018. *Best Paper Award.* (In Portuguese)
- 2017 DA COSTA CORDEIRO, WEVERTON LUIS; **MARQUES, JONATAS ADILSON**; GASPARY, LUCIANO PASCHOAL. *Data Plane Programmability Beyond OpenFlow: Opportunities and Challenges for Network and Service Operations and Management.* Journal of Network and Systems Management, v. 1, p. 1-35, 2017.
- 2017 MARQUES, JONATAS ADILSON; OBELHEIRO, RAFAEL RODRIGUES. Escada: Predicting Virtual Machine Network Bandwidth Demands for Elastic Provisioning in IaaS Clouds. Proceedings of the 2017 IEEE International Conference on Cloud and Autonomic Computing (ICCAC), 2017, Tucson, AZ, USA.