André Evaristo dos Santos

Ph.D. student, M.Sc. in Computer Science, Industrial Engineer

Date of birth: February 8th, 1992

Citizenship: Brazilian dossantos@cs.uregina.ca Office: +1 (306) 585 6254

EDUCATION

2016 PRESENT **University of Regina**, Canada — Ph.D. of Science Student in Computer Science

- Supervisor: Dr. Cory Butz
- Study emphasis: Deep Learning & Probabilistic Graphical Models

2015 2016 **University of Regina**, Canada — Master of Science in Computer Science

- Supervisor: Dr. Cory Butz
- Study emphasis: Probabilistic Graphical Models
- Graduate grade point average: 92.8

2010 2014

University of Santa Catarina State, Brazil — Bachelor of Industrial System Engineering

2013

University of Regina, Canada — Science Without Borders Brazilian Exchange Program - CNPq

2007

SENAI, Brazil — Maintenance Electrician Industrial Training Course

PUBLICATIONS

Papers in Refereed Journals

- 1. C. J. Butz, J. S. Oliveira, A. E. dos Santos, A. L. Madsen, An Empirical Study of Bayesian Network Inference with Simple Propagation, International Journal of Approximate Reasoning, Vol. 92, 198–211, 2018.
- 2. C. J. Butz, A. E. dos Santos, J. S. Oliveira, C. Gonzales, An Empirical Study of Testing Independencies in Bayesian Networks using rp-Separation, International Journal of Approximate Reasoning, Vol. 92, 270-278, 2018.
- 3. C. J. Butz, A. E. dos Santos, J. S. Oliveira, C. Gonzales. *On a Simple Method for Testing Independencies in Bayesian Networks*, **Computational Intelligence**, Vol. 34, No. 3, 789–801, 2018.
- 4. C. J. Butz, J. S. Oliveira, A. E. dos Santos, *On Darwinian Networks*, **Computational Intelligence**, Vol. 33, No. 4, 629–655, 2017.

Refereed Conference Papers

- 1. C. J. Butz, J. S. Oliveira, A. E. dos Santos, A.L. Teixeira, *Deep Convolutional Sum-Product Networks*, **Thirty-Third AAAI Conference on Artificial Intelligence** (AAAI), 2019.
- 2. C. J. Butz, A. L. Teixeira, J. S. Oliveira, A. E. dos Santos, On the Tree Structure of Deep Convolutional Sum-Product Networks, Thirty-Second International Florida Artificial Intelligence Research Society Conference (FLAIRS), 500--503, 2019.
- 3. C. J. Butz, A. E. dos Santos, J.S. Oliveira, A. L. Madsen, *Exploiting Symmetry of Independence in d-Separation*, **Thirty-second Canadian Conference on Artificial Intelligence (AI)**, 42--54, 2019.
- A. L. Madsen, C. J. Butz, J. S. Oliveira, A. E. dos Santos, Solving Influence Diagrams with Simple Propagation, Thirty-second Canadian Conference on Artificial Intelligence (AI), 68--79, 2019.
- 5. C. J. Butz, J. S. Oliveira, A. E. dos Santos, A. L. Teixeira, P. Poupart, A. Kalra, An Empirical Study of Methods for SPN Learning and Inference, Ninth International Conference on Probabilistic Graphical Models (PGM), 49--60, 2018.
- 6. A. L. Madsen, C. J. Butz, J. S. Oliveira, A. E. dos Santos, Simple Propagation with

SKILLS

Artificial Intelligence
Deep Learning
Machine Learning
Web Development
Product Development
Engineering
Sum-Product Networks
Bayesian Networks
Join Tree Propagation
Python, C++, R
JavaScript, PHP, MySQL

TEACHING

Cs310

Discrete Computational Structures

Cs110 Lab

Programming and Problem Solving

CS210 Lab

Data Structures and Abstractions

CS215 Lab

Web and Database Programming

LANGUAGES

English

Advanced Professional Proficiency

Portuguese

Functionally Native Proficiency

- Arc-Reversal in Bayesian Networks, Ninth International Conference on Probabilistic Graphical Models (PGM), 260--271, 2018.
- C. J. Butz, A. E. dos Santos, J. S. Oliveira, J. Stavrinides, Efficient Examination of Soil Bacteria using Probabilistic Graphical Models, Thirty-first International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, 315--326, 2018.
- 8. C. J. Butz, J. S. Oliveira, A. E. dos Santos, *On Learning the Structure of Sum-Product Networks*, **IEEE Symposium Series on Computational Intelligence**, 2997--3004, 2017.
- A. E. dos Santos, C. J. Butz, J. S. Oliveira, On Converting Sum-Product Networks into Bayesian Networks, Thirtieth Canadian Conference on Artificial Intelligence (AI), 329-334, 2017.
- 10. J. S. Oliveira, C. J. Butz, A. E. dos Santos, Resolving Inconsistencies of Scope Interpretations in Sum-Product Networks, **Thirtieth Canadian Conference on Artificial Intelligence (AI)**, 303--315, 2017.
- 11. C. J. Butz, A. E. dos Santos, J. S. Oliveira, On Finding Relevant Variables in Discrete Bayesian Network Inference, Thirtieth International Florida Artificial Intelligence Research Society Conference (FLAIRS), 730--735, 2017.
- C. J. Butz, A. E. dos Santos, J. S. Oliveira, Relevant Path Separation: A Faster Method for Testing Independencies in Bayesian Networks, Eighth International Conference on Probabilistic Graphical Models (PGM), 74--85, 2016.
- 13. C. J. Butz, J. S. Oliveira, A. E. dos Santos, A. L. Madsen, On Bayesian Network Inference with Simple Propagation, Eighth International Conference on Probabilistic Graphical Models (PGM), 62 -- 73, 2016.
- 14. C. J. Butz, A. E. dos Santos, J. S. Oliveira, C. Gonzales, A Simple Method for Testing Independencies in Bayesian Networks, Twenty-ninth Canadian Conference on Artificial Intelligence (AI), 213--223, 2016.
- 15. A. L. Madsen, C. J. Butz, J. S. Oliveira, A. E. dos Santos, On Tree Structures used by Simple Propagation for Bayesian Networks Inference, **Twenty-ninth Canadian** Conference on Artificial Intelligence (AI), 207--212, 2016.
- 16. C. J. Butz, J. S. Oliveira, A. E. dos Santos, A. L. Madsen, *Bayesian Network Inference with Simple Propagation*, **Twenty-ninth International Florida Artificial Intelligence Research Society Conference (FLAIRS)**, 650 -- 655, 2016.
- 17. C. J. Butz, A. E. dos Santos, J. S. Oliveira, C. Gonzales, Testing Independencies in Bayesian Networks with i-Separation, **Twenty-ninth International Florida Artificial Intelligence Research Society Conference (FLAIRS)**, 644 -- 649, 2016.
- 18. C. J. Butz, J. S. Oliveira, A. E. dos Santos, *Darwinian Networks*, Twenty-eighth Canadian Conference on Artificial Intelligence (AI), 16--29, 2015.
- 19. C. J. Butz, J. S. Oliveira, A. E. dos Santos, Determining Good Elimination Orderings with Darwinian Networks, Twenty-eighth International Florida Artificial Intelligence Research Society Conference (FLAIRS), 600 -- 603, 2015.

EXPERIENCE

- 2019 **Computer Science Department University of Regina,** Canada University Teaching Fellowship CS310 Discrete Computational Structures Sessional Lecturer
- Computer Science Department University of Regina, Canada Graduate Teaching
 Assistant CS110, CS215, C210 Lab instructor, Marker
- Audio Visual Services University of Regina, Canada Casual clerk
- Audio Visual Services University of Regina, Canada Distant education broadcasting operator
- Audio Visual Services University of Regina, Canada Co-op placement
- Guhring Brasil Ferramentas LTDA, Brazil Logistic assistant

LANGUAGES - cont.

Spanish

Conversational Proficiency

French

Elementary Proficiency

AWARDS

Graduate Studies Research Fellowship (GRF) \$22,623.38/year for 4 years Fall/2016

Scholarly Awards \$5,600 Winter/2016 \$6,000 Fall/2015 \$3,500 Summer-Spring/2015 \$6,000 Winter/2015

Science Without Borders SWG/CanadaCBIE \$ 65,023.41 BLR 2013

VOLUNTEER/COMMUNITY

2018 2019	University of Regina Jiu Jitsu Club - President
2018	University of Regina Jiu Jitsu Club - Logo creator
2017 2018	University of Regina Jiu Jitsu Club - Treasurer
2015 2016	Brazilian Students Association of University of Regina - Treasurer
2016	RPIRG The Green Patch Garden - Logo creator
2010	UDESC Introduction to Computers for the Elderly and Adults (Voo Livre Project) - Instructor