

LUCAS PASCOTTI VALEM

MASTER'S STUDENT IN COMPUTER SCIENCE

BIO

Lucas Pascotti Valem was born on 5 May 1995 in Limeira, São Paulo, Brazil. He received a BSc degree in Computer Science from the São Paulo State University (UNESP) in 2016. He is currently a Master student at the same university. His main areas of research interest are information retrieval, image retrieval by content, machine learning, computer vision, deep learning, image processing, pattern recognition, and parallel computing.

EDUCATION

Year	Degree	Institution
2017-2019 (Current)	M.Sc., Computer Science	São Paulo State University, Rio Claro, São Paulo, Brazil
2013-2016	B.Sc., Computer Science	São Paulo State University, Rio Claro, São Paulo, Brazil

FELLOWSHIPS

- **Selection and Combination of Unsupervised Learning Methods for Image Retrieval**
Supervisor: Prof. Dr. Daniel Carlos Guimarães Pedronette.
Type: Master's Research.
Foundation: Fundação de Amparo a Pesquisa do Estado de São Paulo (FAPESP) - Grants 2017/02091-4 and 2013/08645-0.
Period: 05/2017 - 05/2019.
- **Re-Ranking and Rank Aggregation Approaches for Image Retrieval Tasks**
Supervisor: Prof. Dr. Daniel Carlos Guimarães Pedronette.
Type: Undergraduate Research.
Foundation: Fundação de Amparo a Pesquisa do Estado de São Paulo (FAPESP) - Grants 2017/02091-4 and 2013/08645-0.
Period: 05/2014 - 12/2016.
- **Development of Educational Softwares for Math Students**
Supervisor: Rosana Giaretta Sguerra Miskulin.
Type: University Extension Project.
Foundation: Fundação CAPES - Programa de Excelência Acadêmica (Proex).
Period: 04/2013 - 10/2013.

PUBLICATIONS

- **Journal Papers:**
 - VALEM, L. P. ; DE OLIVEIRA C. R. ; PEDRONETTE, D. C. G. ; ALMEIDA, J. . **Unsupervised Similarity Learning through Rank Correlation and kNN Sets.** In: The ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM); 2018.
 - VALEM, L. P. ; PEDRONETTE, D. C. G. ; ALMEIDA, J. . **Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Tasks.** In: Pattern Recognition Letters (PRL); 2017.
- **Conference Papers:**
 - VALEM, L. P. ; PEDRONETTE, D. C. G. ; BREVE, F. ; GUILHERME, I. R. . **Manifold Correlation Graph for Semi-Supervised Learning.** In: IJCNN IEEE WCCI, 2018, Rio de Janeiro - Brazil.
 - ALMEIDA, J. ; VALEM, L. P. ; PEDRONETTE, D. C. G. . **A Rank Aggregation Framework for Video Interestingness Prediction.** In: 9th International Conference on Image Analysis and Processing (ICIAP), 2017, Catania - Italy.

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- VALEM, L. P. ; PEDRONETTE, D. C. G. . **Selection and Combination of Unsupervised Learning Methods for Image Retrieval**. In: 15th International Workshop on Content-Based Multimedia Indexing (CBMI' 17), 2017, Florence - Italy.
- VALEM, L. P. ; PEDRONETTE, D. C. G. . **An Unsupervised Distance Learning Framework for Multimedia Retrieval**. In: ACM International Conference on Multimedia Retrieval (ICMR), 2017, Bucharest - Romania.
- VALEM, L. P. ; PEDRONETTE, D. C. G. . **Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Tasks**. In: SIBGRAPI Conference on Graphics, Patterns and Images, 2016, São José dos Campos - Brazil.
- VALEM, L. P.; PEDRONETTE, D. C. G.; TORRES, R. da S.; EDSON BORIN; ALMEIDA, J. . **Effective, Efficient, and Scalable Unsupervised Distance Learning in Image Retrieval Tasks**. In: ACM International Conference on Multimedia Retrieval (ICMR), 2015, Shanghai - China.

AWARDS

- **2017: First Place, 36th Contest of Undergraduate Research Projects (CTIC)**, "Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Task.", Congress of the Brazilian Computer Society (CSBC 2017).
- **2017: Honor Student in Undergraduate Research Award**, São Paulo State University (UNESP); Rio Claro, São Paulo, Brazil.
- **2016: First Place, XXVIII Congress of Undergraduate Research Projects (CIC)**, "Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Task.", São Paulo State University (UNESP).
- **2016: Best Paper Award**; Conference on Graphics, Patterns and Images (SIBGRAPI 2016); "Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Task."; São José dos Campos - Brasil.
- **2015: Fourth Place, XXVII Congress of Undergraduate Research Projects (CIC)**, "Effective, Efficient, and Scalable Unsupervised Distance Learning in Image Retrieval Tasks.", São Paulo State University (UNESP).
- **2015: Classified Among the Top 10, 34th Contest of Undergraduate Research Projects (CTIC)**, "Effective, Efficient, and Scalable Unsupervised Distance Learning in Image Retrieval Tasks.", Congress of the Brazilian Computer Society (CSBC 2015).

OTHER ACTIVITIES

- **Teaching:**
 - **How to Implement a Computer Emulator**
Date: 20/10/2016.
Type: Workshop, Tutorial
Event: Computer Science Study Week (SECCOMP 2016).
Place: São Paulo State University, Rio Claro, Brazil.
Description: The main aspects about how to understand and implement a simple emulator were taught. The students implemented a Chip8 emulator (a basic interpreter). All course material is available online and can be accessed at github.com/lucasPV/Chip8Seccomp.
 - **Teaching Basic Computer Skills for the Third-age**
Project Coordinator: Miriam Godoy Penteadó.
Period: 01/09/2013 - 01/12/2013 (friday mornings), 01/03/2014 - 01/06/2014 (tuesday mornings).
Place: São Paulo State University, Rio Claro, Brazil.
Description: A voluntary work aiming at teaching basic computer skills (typing texts, listening to music, browsing the web, and others).

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COMPUTER SKILLS

- **Operating Systems:** Mac OS X, Windows, GNU/Linux, BSD.
- **Programming Languages:** C, C++, Java, Python, Perl, Assembler X86, Bash scripting, Javascript, Pascal.

LANGUAGES

English (Advanced), Portuguese (Native), Spanish (Basic), Japanese (Basic)