Curriculum Vitae - Lucas S. Althoff

PhD. Student/ Researcher
Computer Science Department
Adress: Campus Darcy Ribeiro, Department of Electrical Engineering, 70919-970, Brasília, Brazil.
Phone: (+55) 61999965391
Website: https://lucas-althoff.github.io
Research Gate: https://www.researchgate.net/profile/Lucas_Althoff
CV-Lattes: http://lattes.cnpq.br/5258070059803891
E-mail: ls.althoff@gmail.com

Research interests

- Spherical video processing, visual attention, saliency prediction, machine learning;
- Computational physics, astrophysics, spectral analysis;
- STEAM teaching and learning, multidisciplinary teamwork, creative thinking;
- Project management, business process, 4.0 industry technology.

Education

University of Brasília – UnB.
B.Sc. in Computational Physics.
August/09 - July/14.

Catholic University of Brasília – UCB.
Major in physics**.**
July/16 - July/17.

University of Brasília – UnB, National Mastership Physics Teaching Program.
M.Sc in Physics Teaching.
July/16 – December/18.

University of Brasília – UnB, Post-graduation Informatics Program**.**
Ph. D. in Computer Science.
February/19 – Present.

Awards

- Best Dissertation Paper in Proeb/Capes from the M.Sc Program MNPEF (mention by the Brazilian Physics Society (SBF) including Prof. Marco Antônio Moreira) 2018.
- Best paper submitted at XXIV IJCIEOM 2018, paper included as book chapter.

Position held

1. ***Perceptually-Efficient Streaming of 360-degrees Edited Video - University of Brasília – Research Assistant,*** *2020 – present.*
   Research on 360-degree video processing, deep learning models, saliency prediction, 360-degree video streaming, subjective visual experiments, visual quality assessment.

2. ***Project MAP - University of Brasília – Research Assistant,*** *2018 – present.*
   Post-graduate research assistant. Integrating a multidisciplinary project in CEFTRU/UnB in collaboration with a Brazilian military organization. As assistant I supervise a research team on 4.0 industry technological solutions including methods of data science, requirements engineering, business process and competencies management. Also responsible for research

planning, project management. development of new methodologies.

3. ***Physics and math teacher in high school,*** *2014 – 2018.*
   Public and private educational system. Dealing with active methodologies like inverted classroom, blended classroom. . Experienced teaching inside different social in contexts.

4. ***University of Brasília – Graduation Research,*** *2011-2013.*
   Graduate student/research assistant. Research on filtering techniques of spherical astrophysical data. Dealing with spectral analysis and phenomena like gamma ray bursts and cosmic microwave background. Occupied the role of monitor in three graduation disciplines.

Publications

Thesis & conclusion work

[1] **Particle Physics from the Dialogue: A Teaching Methodology to the Evening High School.** Lucas S. Althoff. Master Thesis. University of Brasília, 2018.

[2] **Implementation of Massively Parallelized Algorithms for decontamination of the Cosmic Microwave Background Radiation Part I: Component Separation Algorithm.** Final Graduation Work. Lucas S. Althoff. University of Brasília, 2014

Book Chapters

[3] **A bibliographic review of Software Metrics: applying the Consolidated Meta-Analytic Approach**, Ari Melo Mariano, Ana Carla Bittencourt Reis, Lucas dos Santos Althoff, Laís Bandeira Barros In: Springer Proceedings in Mathematics & Statistics (PROMS, XXIV IJCIEOM 2018, pg. 243-256).

Refereed Conference Papers

[4] **Exploring Active Learning Resources for Team Training in a Multidisciplinary Research Project,** Lucas S. Althoff, Camila M. A. Silva, Patrícia M. Milhomem, Ana Carla B. Reis, In: PAEE/ALE proceedings, 2019.

[5] **The Fermi Observatory's data processing and analysis chain for studying gamma-ray bursts,** Lucas S. Althoff, Ivan Soares Ferreira, Eduardo Couto e Silva, In: 19º Congresso de Inicição Científica da UnB, 2013.

[6] **Implementation of Massively Parallelized Algorithms for decontamination of the Cosmic Microwave Background Radiation Part I: Component Separation Algorithm,** Lucas S. Althoff, Ivan Soares Ferreira. In: 19º Congresso de Inicição Científica da UnB, 2012.

Graduation Defense Committe Member

- Análise de Modelos de Saliência para Vídeos 360 Graus, Bernardo Magalhães Morales, Part of Electrical Engineering Conclusion Graduation, University of Brasília, 2019. Defense commitee members: Mylène C. Q. de Farias (Advisor), João Luiz Azevedo de Carvalho, Lucas dos Santos Althoff.

Complementary skills and formation

- B2 TOEFL\itp – 2018 (Listening Comprehension: 60, Structure & Written Expression: 58, Reading Comprehension: 57, Total score: 583);
- Curso de editoração científica em Latex – 2010;
- Completed 9 hours e-course on Udemy: The Python Bible – 2019.