

## Research Interest

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- Virtual reality, user experience, data analytics, machine-learning;
- Multimedia quality assessment, image processing, visual attention;
- Cinematography, video editing, video storytelling.

## Education

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- **Ph. D. in Computer Science.** *February/19 – Present.*  
Computer Science Department, University of Brasília. Advisor: Prof. Mylène C. Q. Farias
- **M.Sc in Physics Education.** *July/16 – December/18.*  
National Mastership Physics Education Program, University of Brasília.
- **Major in physics.** *July/16 - July/17.*  
University Catholic of Brasília.
- **B.Sc. in Computational Physics.** *August/09 - July/14.*  
Computer Science Department, University of Brasília.

## Awards

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- Best Dissertation Paper in Proeb/Capes from the M.Sc Program MNPEF. *December/2018.*
- Best paper submitted at XXIV IJCIEOM 2018, paper included as a book chapter. *July/2018.*

## Research Position Held

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1. **Research Engineer - Université de Poitiers - XLIM lab.** *Jan/2022 – Aug/2022.*  
*Research in the field of subjective quality assessment of immersive multimedia. I collaborate with a senior researcher, performing a meta-analysis on the reliability of subjective quality assessment of omnidirectional images/videos. Advisor: Prof. Muhammed-Chaker Larabi.*
2. **Research Assistant - FAPESP Research Project** *March/2022–Mai/2022.*  
**Research Project: Perceptually-Efficient Streaming of 360-degrees Edited Video**  
*Project focused on optimizing streaming 360-degree video. Conducted subjective experiments, developed tools for 360 saliency prediction models, integrate design 360-degree video streaming. Advisors: Prof. Ravi Prakash, Prof. Marcelo M. Carvalho, Prof. Mylène C. Q. Farias.*
3. **Research Intern – Laboratoires Mixtes Internationaux** *Mai/2021 – Mai/2022.*  
**Cross-border Observatories for the Environment, Climate and Vector Diseases**  
*Perform Analytics and Extract, Transform and Load (ETL) procedures for cross-border epidemiological data integration and harmonization, with the application to malaria in the cross-border area between French Guiana and Brazil. Advisor: Prof. Emmanuel Roux.*
4. **Research Assistant – University of Brasília - Research Project,** *Aug./2018 –Aug./2020.*  
**Research Project: Automation and Improvement of Business Process.**  
*Project in the field of Production Eng. & Software Eng. applied to the field of 4.0 industry. I was responsible for leading a team and coordinating the research results. Advisors: Prof. Ari M. Mariano, Prof. Simone B. S. Monteiro.*

## Selected Publications

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### Pre-print

- 2022 **Towards the Effects of Alignment Edits on the Quality of Experience of 360 Videos**, Lucas S. Althoff, Alessandro Rodrigues, and Mylène C. Q. Farias, ArXiv.  
<https://arxiv.org/abs/2205.10649>

### Peer-reviewed Conferences

- 2021 **A Content-Based Viewport Prediction Model**, Dario D. Morais, Lucas S. Althoff, Ravi Prakash, Marcelo M. Carvalho, and Mylène C. Q. Farias. Electronic Imaging.  
<https://library.imaging.org/ei/articles/33/9/art00016>
- 2021 **Ethical Perspectives in AI: A Two-folded Exploratory Study From Literature and Active Development Projects**, José A. S. de Cerqueira, Lucas S. Althoff, Paulo De Almeida, and Edna Canedo, HICSS.  
<http://hdl.handle.net/10125/71257>
- 2019 **Exploring Active Learning Resources for Team Training in a Multidisciplinary Research Project**, Lucas S. Althoff, Camila M. A. Silva, Patrícia M. Milhomem, and Ana Carla B. Reis. PAEE/ALE - 11th International Symposium on Project Approaches in Engineering Education (PAEE) 16th Active Learning in Engineering Education Workshop.

### Book Chapter

- 2019 **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 (Awarded paper, XXIV IJCIEOM 2018).  
[https://doi.org/10.1007/978-3-030-14969-7\\_21](https://doi.org/10.1007/978-3-030-14969-7_21)

## Participation as Research Reviewer

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- Voluntary reviewer (IEEE VR, SVR 2021, VRST 2020)
- Voluntary at Society for Imaging Science and Technology (EI2022)

## Graduation Defense Committee Member

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- **Analysis of Saliency Models for 360° Videos**, Bernardo Magalhães Morales, Part of Electrical Engineering Conclusion Graduation, University of Brasília, 2019. Defense committee members: Mylène C. Q. de Farias (Advisor), João Luiz Azevedo de Carvalho, Lucas dos S. Althoff.
- **Annotation of Regions of Interest for 360° Videos**, Myllena de Almeida Prado, Part of Mechatronical Engineering Conclusion Graduation, University of Brasília, 2021. Defense committee members: Mylène C. Q. de Farias (Advisor), João Luiz Azevedo de Carvalho, Lucas S. Althoff.
- **Protótipo WebSig para Suporte à Produção Cartográfica do Laboratório de Geografia, Ambiente e Saúde da Universidade de Brasília**, Guilherme Felix Menezes, University of Brasília 2020. Defense committee members: Helen Gurgel (Advisor), Emmanuel Roux, Lucas S. Althoff.

## Complementary Skills

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- Programming Languages: Python, R, Pytorch, Javascript, C#;
- Extra tools: Adobe Premiere, Latex, Unity, Unreal Engine;
- English professional proficiency - B2 TOEFL\itp

*CV - Simplified version  
Last update: 24, Mai, 2022*