Amanda Figur

+55 62 981 223 403 | <u>Email</u>: ac.figur@gmail.com | <u>Linkedin</u> and <u>GitHub</u>

EDUCATION

University of São Paulo   Mar. 2020 – Mar. 2022
Master of Arts in Computer Graphics   *GPA:* 3.78/4.00

University of São Paulo   Feb. 2014 – Dec. 2019
Bachelor of Arts in Mathematics, Minor in Set Theory and Logics.   *GPA:* 2.56/4.00

EXPERIENCE

Geometry Processing Research Assistant   Mar. 2020 – Present
University of São Paulo   *São Carlos, SP, BR*
- Developed an algorithm which generates an eyeglasses mask over a human portrait and inpaints it (available on GitHub under the name "Oculus Extinguisher") using Python with the libraries NumPy and Matplotlib.
- Implemented an algorithm for the extraction of ridge curves in polynomial parameterized surfaces using Maple.
- Currently developing and implementing an algorithm for the extraction of ridge curves on human faces parametrized by B-Splines using Matlab.
- Accepted work on the Proceeding Series of the Brazilian Society of Computational and Applied Mathematics entitled "Extraction of robust features on human faces".

Undergraduate Teaching Assistant   Mar. 2016 – Jun. 2017
University of São Paulo   *São Carlos, SP, BR*
- Courses: introduction to programming and introduction to set theory.
- Supervised practical C++ labs weekly for 2 semesters.
- Mentored 20+ freshman students weekly for 3 semesters.
- Elaborated and graded 6 tests.

VOLUNTEERING

6th Brazilian Study Group with Industry   Mar. 2021
CeMEAI and IMPA   *Remote*
- Worked on a project alongside Petrobras developing a CNN for seismic inversion.
- Project executed in Python using TensorFlow.

Mathematics Summer Course   Feb. 2021
University of São Paulo   *Remote*
- Taught a 12-hour course about NURBS curves and surfaces. To be turned a book chapter in Portuguese.

Student Representative   Aug. 2017 – Aug. 2019
University of São Paulo   *São Carlos, SP, BR*
- Commited to monthly meetings on the Undergraduation Commitee of Mathematics.
- Maintained direct contact with undergraduate students to understand their demands and needs on the mathematics course. Additionally, I oriented students on how to express their demands to the university professors.

SIGGRAPH Student Volunteer   Aug. 2018
ACM SIGGRAPH   *Vancouver, BC, CA*
- Commited to 25 hours of volunteer service, providing integral operational support to the conference.

SCIENCE COMMUNICATION

Seminars and Podcasts   2015 – 2018
- Proof of first Gödel's incompleteness theorem using a programming language (<u>video</u> in Portuguese)
- Explaining the axiom of choice through a hat riddle (<u>video</u> in Portuguese)
- Interview with the Professor Ítala D'Ottaviano about non-standart logics (<u>audio</u> in Portuguese)
- Interview with the professor Jaume Llibre about ordinary differential equations (<u>audio</u> in Portuguese)

GENERAL SKILLS

Programming Languages: C/C++ (10+ years), Matlab (3+ years), Python (2+ years), Maple
Languages: Portuguese (Native), English (Working Professional)
Hobbies: Digital drawing and animation, PC building and maintenance, cycling, gardening