## FAGNER CUNHA Ph.D. Student Manaus, AM, Brazil

+55 92 98176 7994fagner.cunha@icomp.ufam.edu.br

github.com/alcunha/

in linkedin.com/in/cunhaf

Jan 21st, 2022

Dear André-Philippe Drapeau Picard,

I'm writing this letter to apply for the IA internship to work with computer vision in a project for butterfly identification, which I read on Professor David Rolnick's Twitter. I am a Ph.D. student at the Federal University of Amazonas, and my research focuses on computer vision for information extraction in images captured by camera traps. I'm confident my research experience makes me a great fit for this internship.

In recent years I have applied in my research several techniques to deal with fine-grained image classification and large-scale long-tailed datasets. During my master's research, I was invited to join the Project Providence, which was revolutionary research to develop technology to monitor the Amazon biodiversity. In this project, I was responsible for developing deep learning models for animal species recognition on the camera vision module.

To better assess my skills, I participated in the last two editions of the iWildCam competition from the Workshop on Fine-Grained Visual Categorization (FGVC/CVPR). In 2020, I was in the fourth position of iWildCam whose task was to identify the animal species in camera trap images. In 2021 I won iWildCam's challenge, where we had to count the number of animals of each species present in a sequence of images. Additionally, in 2021 I participated in the iNaturalist competition, where my solution included an image classifier for the 10 thousand species and a geo prior model, being ranked in the 6th position. Solutions are available on my GitHub.

Thus, relying on my experience with deep learning for camera trap images classification and my experiences in competitions dealing with the same problem class, I believe I have the required profile and skills to contribute to your project's success.

Please don't hesitate to reach out if you have any questions about my background. Thank you for your time and I'm looking forward to attending this project.

Sincerely,

Fagner Cunha