**Crop field detection using graph-based image segmentation and contrastive learning**

**Eduardo Nascimento - Qualification Exam Feedback**

**Prof. Ricardo Cerri (**[**https://www.linkedin.com/in/ricardo-cerri-7b121b36/**](https://www.linkedin.com/in/ricardo-cerri-7b121b36/)**)**

1. Good presentation skills.
2. Good time management.
3. Explain better in the document the validation equations.

**Prof. Jurandy Almeida (https://www.linkedin.com/in/jurandy-almeida/)**

1. Presentation
   1. Started 14:07 and finished 14:37, right on time.
   2. Good presentation, good teaching skills.
2. Writing
   1. Good writing skills. Format and language usually seen in PHD qualifications.
3. Content
   1. Introduction listed 4 challenges but the way they are going to be addressed is not 100% clear in the document.
   2. The are important papers published in 2022 that must be in the Related Work section.
      1. [Self-supervised contrastive learning on agricultural images. *(Ronja Güldenring)*](https://www.sciencedirect.com/science/article/pii/S0168169921005275)
      2. [Global and Local Contrastive Self-Supervised Learning for Semantic Segmentation of HR Remote Sensing Images. *(Haifeng Li)*](https://arxiv.org/abs/2106.10605)
4. Suggestions
   1. Why not pixel level segmentation? Is level 12 hexes a big loss of accuracy?
      1. Answered: Field analysis will be in hex level
   2. Why not segmentation using deep learning (graph convolutional network – GCN)?
5. General Project Feedback
   1. It is a very interesting project with potential for promising developments. In case my experience is of any contribution to this project, please reach out to me.

**Prof. Tiago Almeida (https://www.linkedin.com/in/talmeida-ufscar)**

1. Feedback received during the consensus meeting
   1. The presentation as well as the project were highly praised. No questions about the approval and the permission to move forward.