



# Master Thesis - ML for optimizing image selection for texturing

## About Maxar

Maxar Sweden serves the global professional geospatial market with world-leading 3D geodata, 3D visualization solutions, and 3D image processing solutions. We're on a mission to build the Globe in 3D—a revolution in GEOINT tradecraft—that offers decision makers and analysts the entire world in highly accurate, immersive 3D. Maxar's customers are varied and come from the telecommunications, emergency response, defense, and intelligence communities.

We are searching for the best and brightest to join a culture that is open and flexible, inclusive and positive. We offer opportunities for growth and the ability to work with talented people who make a real difference for our clients. Most of our research and development work is done in our Linköping office in Sweden, which employs about 80 engineers who work on cutting-edge technology to produce unparalleled, global, precise 3D geospatial data and software.

## The Thesis

Images taken from a satellite often contain haze or other distortions which affect the coloring of the images. This makes the color space between images vary varying which can make the texturing of a 3d reconstructed surface non-realistic. To create a realistic texture of the 3d model is essential for the user experience and therefor of most importance for Maxar, since our models is used for flight simulators and gaming industry.

To create a realistic texturing, which is better than using the average of all images, a scoring system which describes how realistic, or good, an image is for texturing would be helpful. This is typically a machine learning problem, and the usage will be investigated in the thesis.

## Qualifications

Master of Science student with an interest in AI and image registration techniques.

## Contact

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