

# **Geomechanical Engineer**

Expertise	Rock Mechanics
Education	M.Sc. Civil Engineering (Soil and Rock Engineering), 2024 Luleå University of Technology, Luleå, Sweden
Professional Experience	
2024 – Present	Itasca Consultants AB, Luleå, Sweden Geomechanical Engineer
2022 and 2023	Itasca Consultants AB, Luleå, Sweden Summer Internship
2021	AFRY, Rock Engineering and Geotechnical Engineering, Luleå, Sweden Internship

### **Project Experience**

## Numerical Analysis:

Master Thesis project in which three-dimensional numerical modelling was used to study wedge stability. Simulation of different tunnel geometries, rock mass properties, joint orientation and size parameters, stresses and at different depths. Modelling was conducted using *3DEC*.

Three-dimensional analysis of stopes to determine dilution using *FLAC3D*. Simulation of different stope geometries, rock mass properties and at different depths.

Additional experience includes two-dimensional FEM analysis in RS2 and wedge stability analysis in UnWedge.

### Field work:

Geomechanical core logging for Kaunis Iron (RQD, RMR, Q).

Measurement and evaluation of blasthole depth for improved drilling, charging, and blasting in open-pit mining.

Assisting at geotechnical surveys investigating soil properties and soil depth. Investigation methods used include soil- rock- sounding, light sounding and impact sounding. Installation of groundwater tubes and assessment of groundwater level.

### Soil Engineering:

Planning, execution, and evaluation of geotechnical surveys. Documentation of results in geotechnical reports (MUR).