

Senior Engineer

Expertise Rock mechanics applied to mining and numerical modeling

Education M.A.Sc. (Mining Engineering), 2024
University of British Columbia
Mining Engineer, 2016
Universidad de Santiago de Chile, Chile

Honors A Ping Engineering, DAAD (2014)

Keynote Lectures Second International Slope Stability in Mining Conference, Perth, Australia
2021

Professional Experience

2024 – Present	ITASCA Minneapolis Senior Engineer
2019 – 2024	Geomechanics Engineer
2017 – 2019	ITASCA Chile Project Engineer
2016	Thesis Student

Project Experience

Rock Mechanics Applied to Surface Mining: Numerical modeling projects for diverse problems at some of the largest open-pit mines in the world, including Chuquicamata, Collahuasi, and Escondida (Chile); Jwaneng and Karowe (Botswana); Bingham Canyon, Cortez, and Morenci (USA); Antapaccay (Peru); and Bajo de la Alumbrera (Argentina). Surface-mining activities: estimating rock mass properties, calibrating numerical models for slope stability assessments, back-analyzing slope failures, and studying remedial measurements (dewatering, buttresses, step-outs, structural support, unloading excavations, etc.).

Rock Mechanics Applied to Cave Mining: Consulting and numerical modeling for diverse problems in cave mining, including extraction-level layout assessments, evaluation of caving potential and caveability, prediction of gravity flow of broken ore, surface subsidence. Consulting services for Chuquicamata, El Teniente, and Andina mines (Chile); New Afton (Canada); Resolution (USA); and Venetia (South Africa).

Numerical Analysis for Practical Geo-engineering Application: Application of numerical models in a variety of practical geo-engineering studies, including large landslide analysis in Aknes, Norway.