

Optimizing Mining Operations

AVCS

Andrew Vidale Consulting Services ("AVCS") is an Adelaide-based company that provides specialist engineering services to the exploration and mining industries. AVCS is driven to provide smarter, practical, and cost-effective solutions to maximize client value.

Industry: Metals and Mining

Location: Australia / New Zealand

Use Cases: Operations, Research

Website: vidaleconsulting.com

Results

- From idea to full concept model in a few days
- Developed a quality solution for their client, despite not having any experience with optimization

AVCS rapidly developed a Gurobi-based application for its client, with no prior optimization modeling experience.

The AVCS staff accessed the Gurobi website and it wasn't long before the latest version of Gurobi was fully installed, trial licensed, and loaded into VB.Net to commence modeling. Gurobi's online help and sample models are a godsend for people who have no prior optimization model-building experience. With the ability to break down the problem into a series of logical components, AVCS staff immediately commenced developing its first MILP optimization model.

In the space of a couple of days, the model progressed from just an idea into a full-blown concept program that would function on a small dataset running the trial license to demonstrate a properly optimized solution.

The model-building process was very straightforward using the .NET interface and having the ability to define the optimization problem using easily understandable logical

expressions rather than requiring a PhD in applied mathematics was fantastic.

The Results: Adoption by Both Consulting Firm and Client

This modeling endeavor ended positively for everyone involved; AVCS and the client both ended up purchasing Gurobi licenses; the client has a fantastic product which allows them to complete an almost impossible task quickly and easily; and AVCS was given the opportunity the develop internal optimization model building capabilities.

Subsequent to this initial work, AVCS had already developed an internal-use software product for another common and complex mine engineering task and are looking forward towards their next development opportunity with Gurobi.

" Congratulations to the Gurobi team for providing such a usable product and a flexible and easily accessible licensing model for its customers."

Andrew Vidale

Managing Director, Andrew Vidale Consulting Services



“ If it wasn't for the easy access to try Gurobi, the fantastic documentation, and of course the always helpful expert support, we would probably not have progressed down the optimization path.”

Andrew Vidale

Managing Director, Andrew Vidale Consulting Services



About AVCS

AVCS combines more than 20 years of mining engineering experience, with industry-leading 3D computer modeling expertise.

Through this combination of skills and experience, AVCS provides assistance in the following areas:

- Open cut mine design and scheduling
- Reserve estimation and reviewing
- Deposit optimization
- Stratigraphic and block modeling
- Survey and reserve reconciliation
- 3D visualization of geological and design data
- Spatial data management and manipulation
- Custom procedures for design, reserving and scheduling
- Application development

“ We are now great proponents of Gurobi.”

Andrew Vidale

Managing Director, Andrew Vidale Consulting Services



Experience Gurobi for Yourself

Our 30-day evaluation license includes:

- Free benchmarking services
- Free model tuning services
- Free access to our world-class technical guidance and support
- Two free hours of one-on-one consulting services

Visit gurobi.com/free-trial to get started!

Academics: You may qualify for a free, full-featured Gurobi license. Explore our academic program at gurobi.com/academia.