



June 2024 Newsletter

Forge

In this issue

Evolution of a scheduling solution
Monitoring deformation underground
Safeguarding legacy mine sites
Laying the groundwork for value
Creating accurate waste dumps
Solution Spotlight—VisionV2X
Training the next generation
Technology and innovation
Solving problems for the future

Welcome to our Forge newsletter June 2024

In this issue of Forge, we are excited to share how our commitment to safety is driving technological innovation across the industry.

Maptek customers are increasingly turning to digital applications for easier and more accurate data collection, analysis and reporting. Experiencing the results was the trigger for Groundwork consultants to acquire a laser scanner for slope stability assessment. Timely information enables their quarry clients to proactively manage safety issues around rock falls, erosion and slumping.

A Canadian gold miner deploys Maptek laser imaging hardware and PointStudio software to safely track deformation of underground workings and optimise ground support.

Wingfield Scale & Measure uses lidar mapping, point cloud visualisation and modelling solutions to safeguard aggregates operations from legacy underground workings.

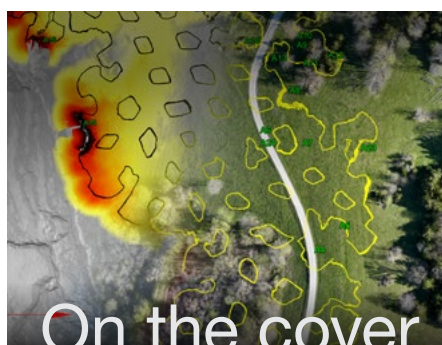
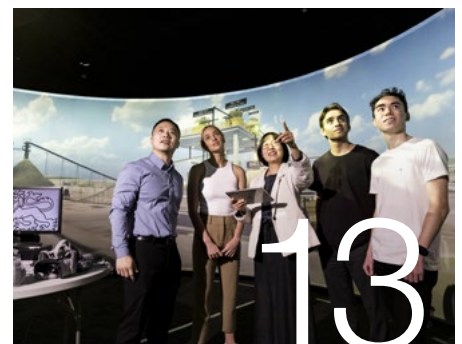
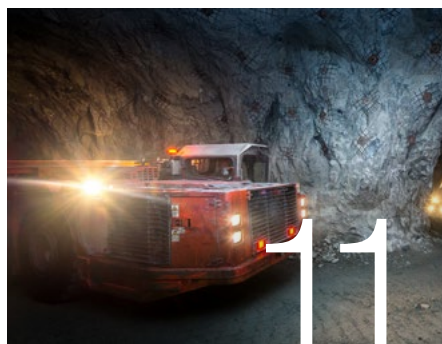
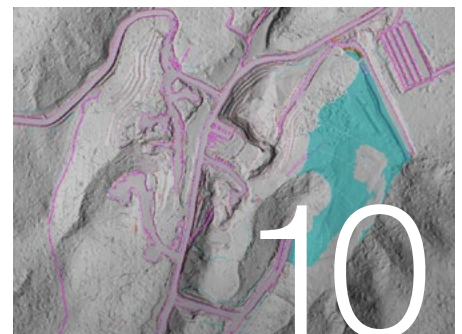
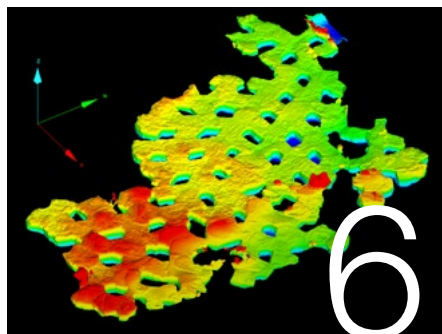
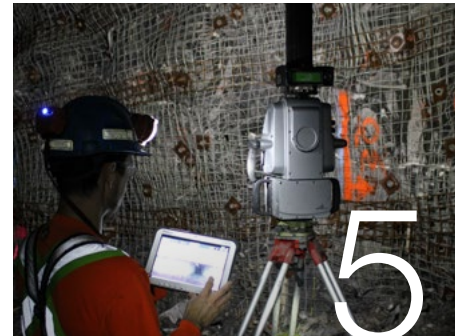
Development continues apace a year on from the release of VisionV2X—we spotlight the technology behind our solution, and how we implement it.

A staged implementation of scheduling software for Origin Mining in Arizona has resulted in smooth uptake for short to medium range planning, targeting improved schedule performance, workflow efficiency and optimisation.

Forge would not be complete without updates from our global university program. From practical training and support for masters studies in technology management at UNSW Sydney and mining and exploration at Camborne School of Mines to excellence in computer science at the University of Adelaide, we are helping students to advance their careers.

We hope you enjoy these and other stories in this issue. Stay safe!

Eduardo Coloma
CEO



Powerful point cloud modelling and analysis tools help customers to prioritise safety of legacy operations

Contact us: forge@maptek.com

Contents

Maptek Forge / June 2024

4

Evolution of a scheduling solution

An open pit copper and molybdenum mine in Arizona benefits from a streamlined implementation of Maptek Evolution scheduling software

5

Monitoring deformation underground

Maptek laser scanning hardware and software make it possible to track deformation of underground workings at a gold mine in Canada

6

Safeguarding legacy mine sites

LiDAR mapping together with point cloud visualisation and modelling software provides an integrated solution that helps safeguard legacy mine sites in Missouri

8

Laying the groundwork for value

High demand for slope stability assessments led a consulting company to pivot towards acquiring a Maptek LR3 laser scanner for in-house monitoring

10

Creating accurate waste dump designs

PT Vale employs Maptek Vulcan for waste dump design at a nickel laterite operation on the island of Sulawesi in Indonesia

13

Technology and innovation

Maptek supports Mining Engineering students at UNSW Sydney to ensure the sustainability of innovation in the minerals and energy resources industry



11

Solution Spotlight: Vision for the future

Maptek VisionV2X is a simple solution with an important mission—to help keep all personnel and vehicles safe while working underground

14

Solving problems for the future

Maptek rewards emerging STEM talent with an annual Computer Science prize for students at the University of Adelaide

12

Training the next generation

Maptek provides students at the University of Exeter with experience in industry standard mining technology

Evolution of a scheduling solution

An open pit copper and molybdenum mine in Arizona benefits from a streamlined implementation of Mapttek™ Evolution scheduling software.

Origin Mining Company owns the open pit Mineral Park copper and molybdenum mine in Kingman, Arizona. Origin Mining is currently operating Mineral Park as a heap leach operation, and plans to restart the concentrator in the next phase of operation.

The decision to implement the Mapttek™ Evolution scheduling solution was driven by two main technical goals:

- > Schedule performance and improved optimisation
- > Workflow efficiency and improved productivity when generating multiple scenarios in a short period of time

'Previously we used a strategic scheduler, with short to medium range mine plans scheduled using MS Excel,' said Mike Chen, Manager Mining, Waterton Global Resource Management, who was in charge of designing schedules.

Origin Mining worked with the Mapttek technical support and customer success teams through a 'software adaptation pipeline' that gradually implemented Evolution Origin Solids, Strategy and Phase using data from the operation.

A subscription model allowed Origin Mining to trial specific applications over a three to five-month commitment.

'We felt the one-month trial was too short to adequately familiarise ourselves with the software and to see its impact on our project—the longer period allowed for a gradual and organic implementation of Evolution,' said Chen.

Maptek set up Evolution over two months using site data. At this stage the Origin Mining team was relatively hands off, observing how Mapttek established the scheduling project from scratch.

'Meeting weekly during this time was perfect as it allowed Origin Mining personnel to focus on existing work priorities and absorb new information at a comfortable pace, preferable to intensive full-day training sessions,' said Chen.

As Origin Mining took over the Evolution files the weekly calls with Mapttek became technical support and problem-solving sessions, exploring various scheduling scenarios and software features. The need for weekly meetings naturally waned and the overall onboarding process was complete.

'Evolution Origin performs as required and we are happy with the features and functionality,' commented Chen.

The combination of the subscription model along with tailored Mapttek training and support was considered a major factor in the successful implementation.

Chen praised the professional expertise and helpful support of the Mapttek team.

'They were open and attentive to our specific engineering challenges. The tailored solutions helped us better understand the software and also unlocked value in the form of a better optimised mining schedule,' Chen concluded.

Origin Mining anticipates implementing Evolution Epoch using a similar approach.

*Thanks to
Mike Chen, Manager Mining,
Waterton Global Resource Management
and Origin Mining Company*



Monitoring deformation underground

Maptek™ laser scanning hardware and software make it possible to track deformation of underground workings at a gold mine in Canada.



The Maptek scanner is a reliable, precise tool, making it very easy to acquire data underground. PointStudio software is also easy to use and provides excellent visualisation.

A gold mining company approached Maptek™ for help in measuring the deformation of underground workings exposed to high stresses, to optimise ground support in an underground mine located in Quebec.

A Maptek™ SR3 laser scanner is deployed at the mine to capture point cloud data for monitoring deformation in workings exposed to seismicity or where unfavourable geomechanical properties can be found, as well as for geological mapping. Maptek™ PointStudio™ software is used for modelling, analysis and reporting.

Previously, convergence monitoring of underground workings was conducted using in situ observations and comments from workers.

In certain instances, the structural deformation has become so great that equipment has difficulty moving without damaging ground support.

Implementing Maptek technology for convergence analysis enables the ground control teams to quantify the rate of convergence to optimise the orientation and dimensions of the openings.

Considering the vast extent of the mine and the time investment required to travel to an area underground, the Maptek solution provides excellent quality videos that accurately replicate reality.

The system is simple to use and provides excellent precision, with laser scan data enabling engineers to assess locations without the necessity to observe firsthand.

The solution also provides more useful field data than photographs for informing decision making, with detail preserved for future needs.

Bringing the information to the surface is a significant time saving for mine geologists and engineers and facilitates decision making and information sharing.

Data accuracy and ease of acquiring data in the field were the most important factors for choosing Maptek.

The Maptek solution is used by multiple teams at the mine.

- > Ground control department for convergence monitoring
- > Video capture for decision making
- > Dimensional measurement and volume estimation
- > Monitoring shotcrete quantities
- > Construction department for precision georeferenced 3D surveys
- > Geology department for cartography

The most important benefit of the implementation is acquiring comprehensive information that enables the safest possible decisions to be made.

The collaboration with Maptek is a positive benefit to the mine, and valuable relationships have been formed.

Safeguarding legacy mine sites

LiDAR mapping together with point cloud visualisation and modelling software provides an integrated solution that helps safeguard legacy mine sites in Missouri.

The Capital Aggregates HWY 63N site near Jefferson City, Missouri contains extensive underground workings from past aggregate mining operations.

To evaluate residual hazards, ensure personnel safety and enable efficient extraction of remaining reserves, Capital Aggregates partnered with Wingfield Scale & Measure Company to deploy an integrated LiDAR mapping solution.

Morgan Powell, Wingfield Senior Geospatial Analyst and Geologist, processed underground SLAM (Simultaneous Localisation and Mapping) data from 2018 scans at the site using Maptek™ PointStudio™ software.

UAV and terrestrial LiDAR was captured and combined with the old underground point clouds to generate a comprehensive and georeferenced 3D model of the surface and subsurface.

'Maptek's powerful point cloud engine allowed us to precisely integrate and analyse the old underground scans against the current surface model,' said Powell.

Capital Aggregates gained a comprehensive 3D visualisation for evaluating residual hazards and planning mitigation approaches around the legacy mine site.

'The key benefit of the LiDAR survey was in allowing us to coordinate and verify the integrity of the 2018 scan data, and accurately orient it to the current surface model,' said Cole Meier, Inventory Manager at Capital Aggregates.

'This enables precise mapping of underground extents, pillars and hazardous areas onto the surface to plan safe, efficient reserve recovery through the abandoned mine workings.'

A critical challenge was identifying potential hazards such as roof collapses, inadequate overburden thickness and subsidence features that could impact personnel safety and future development.

Wingfield's innovative approach fused the current aerial LiDAR topography, previous underground terrestrial scanning and robust survey-grade GPS ground control—all seamlessly integrated within PointStudio.

Accurately surveyed subsurface features enabled Capital Aggregates to increase drilling and blasting efficiency, minimise delays, and prioritise safety while extracting reserves through areas with abandoned workings beneath.

'Without this data pinpointing areas of concern, the project would have been impossible,' said Meier.

Powell leveraged specialised overburden analysis tools within PointStudio to map four zones exhibiting potential roof collapse areas breaching the surface, as well as multiple zones where overburden thickness may be inadequate, based on 2018 underground data.

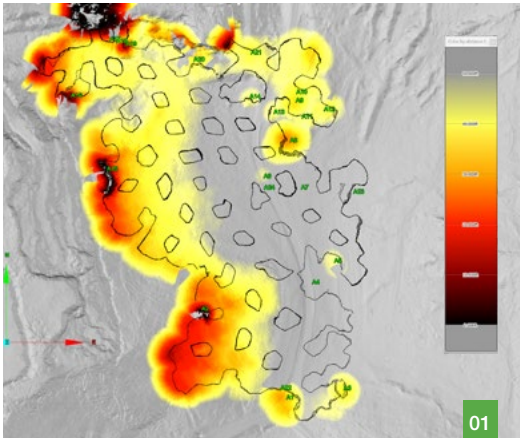
The single most valuable aspect was delineating the mine extents, pillars and unstable areas onto the surface terrains so we could barricade off hazardous zones and ensure the safety of personnel.

While unable to confirm the current underground state, the findings highlighted hazards requiring monitoring and mitigation. Wingfield recommended follow-up surveys to clearly demarcate areas of concern until more extensive underground investigation is feasible.

The project exemplified how LiDAR mapping integrated with Maptek modelling software provided comprehensive visualisations and analysis pinpointing residual hazards around legacy mining areas.

This proactive approach allows Capital Aggregates to stay ahead of potential hazards, optimise operations and prioritise safety across their dynamic quarry environment.

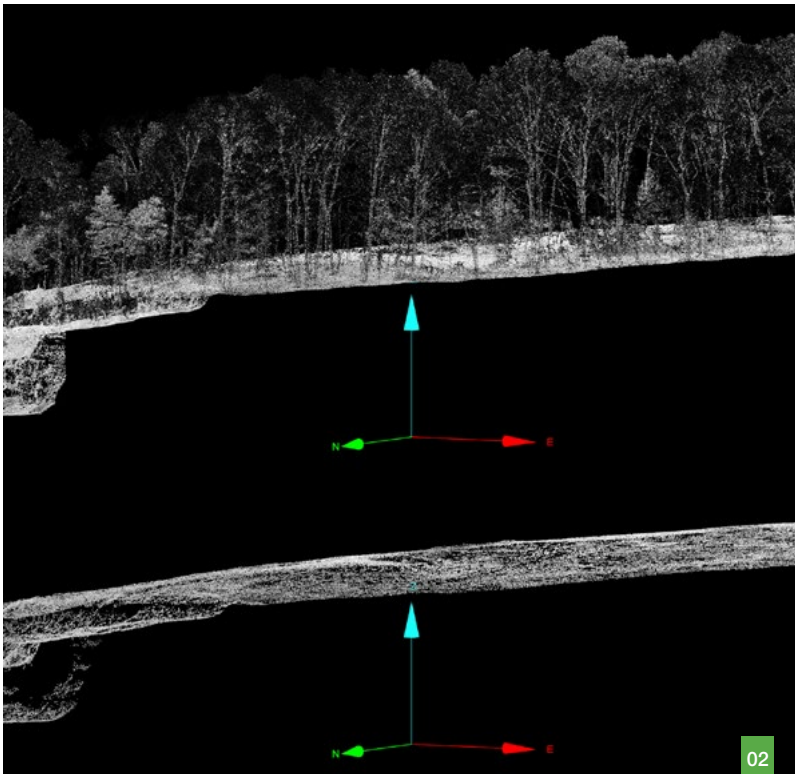
Thanks to
Wingfield Scale & Measure
> James Kenney, CTO
> Morgan Powell, Senior Geospatial Analyst and Geologist
> Hunter Johnson, Field Technician II
Capital Aggregates
> Cole Meier, Inventory Manager
> Chris Williams, VP of Operations



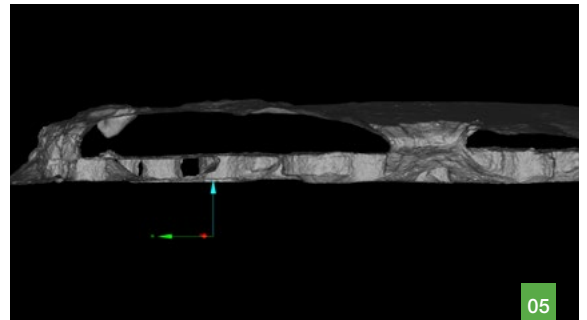
01



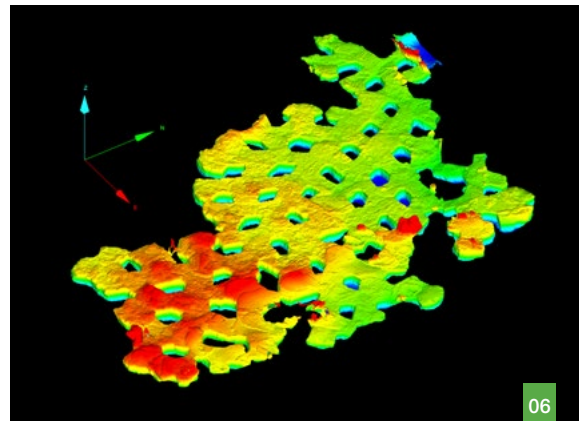
04



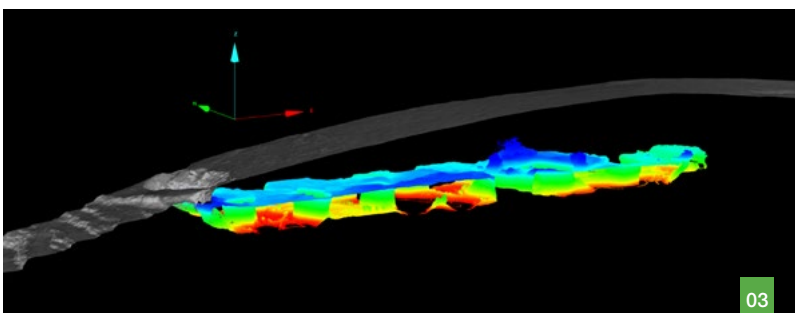
02



05



06



03

- 01 3D surface model coloured by overburden thickness to abandoned underground voids
- 02 UAV aerial LiDAR point cloud showing vegetation pre and post removal
- 03 Cross sectional view of overburden and underground legacy workings
- 04 Underground workings overlaid on topography
- 05 Cross section of a collapse area showing the surface and underground intersection
- 06 Underground 2018 LiDAR scan at blocked portal entrance

Laying the groundwork for value

High demand for slope stability assessments led a consulting company to pivot towards acquiring a Maptek™ LR3 laser scanner for in-house monitoring.



Groundwork, part of SLR Consulting, provides professional geoscience, environmental science, planning and development consultancy services to the mining, quarrying, construction, land use development, power generation and waste management industries.

The Groundwork team provides a range of geotechnical services for quarry development and management including:

- > Rock exploration and appraisal
- > Drilling campaigns
- > Geotechnical engineering, assessments and design
- > Ground control management plans (GCMPs)
- > Slope stability assessments

While undertaking GCMPs and slope stability assessments, Groundwork had previously contracted Maptek™ to map and monitor wall movement. The usefulness of the data acquired gave Groundwork insight into the value of Maptek hardware and software systems.

'Under pressure from a growing workload and high demand for stability assessments, we decided to procure our own scanner,' said Tristan Throup, Operational Consultant, Groundwork.

Maptek assisted the Groundwork team in the transition and provided all the relevant historical data for them to continue the services with their own equipment.

'We could continue wall monitoring and deformation reporting to our clients, while also being responsive to specific requests,' Throup said.

Providing this service in-house has immensely grown Groundwork's internal capability. The geotechnical engineers can make more informed decisions with confidence in the accuracy of the data.

Clients have noted the level of detail they can now observe from small rock falls, erosion or slumping. This is particularly evident for slow moving events that might not otherwise be detectable.

The data helps clients to understand events they may not have realised were happening, allowing proactive management before issues escalate.

Groundwork mainly uses the laser scanner on quarry pit walls. The datasets are easily registered using Maptek™ PointStudio™ software and the distance to object tool helps analyse and compare data from a previous or historic dataset. The team can then inspect any areas of movement in the walls.

Groundwork now has a versatile system for scanning internal environments and undertaking undercover stockpile surveys, where drone or photogrammetry access would be difficult. They can now accurately measure and calculate stockpile volumes.

Throup said that the scanning workflow is straightforward, depending on field of view and distance.

'Our staff are surprised how quick and easy it is to set up and use, register data and then measure distance to objects to report on deformation,' Throup said.

Groundwork has considered other applications, such as creation of pit models where a drone flight is restricted, or underground/tunnel scanning projects.

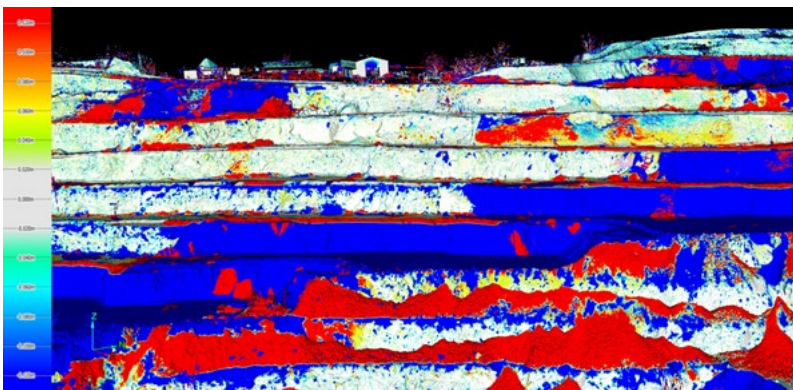
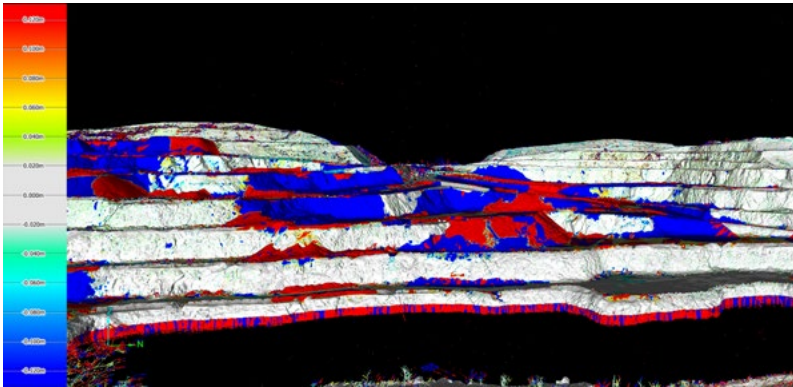
Groundwork aspires to be a leading provider in geotechnical support and advice, with efficient and responsive in-house services for clients. Professional development opportunities have been created for personnel to learn new equipment and technology.

For Groundwork, the biggest benefit from using Maptek technology is gaining direct access to data that can be used to inform safe extraction practices in quarry and mining projects.

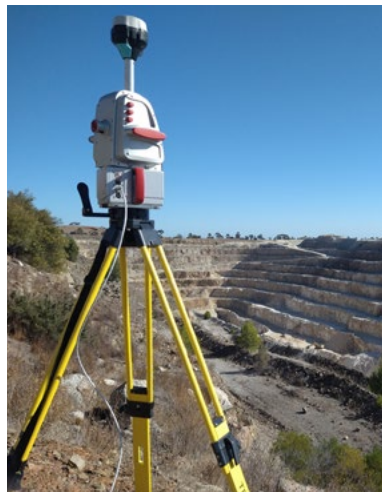
'Support from Maptek has been excellent. Safety is the biggest driver, so being able to provide advisory services to clients supported by tangible scan data means we are doing our best to ensure everyone goes home safely,' concluded Throup.

For the future, Groundwork is considering the PointStudio Geotechnical Tools add-on for conducting further geotechnical assessments and managing geotechnical risks in the quarry environment. They are also exploring opportunities to use Maptek Sentry for real-time wall monitoring.

*Thanks to
Tristan Throup, Operational Consultant
Groundwork Pty Ltd*



Surfaces displayed using the colour by distance tool showing dumping and cuts in the pit (red/blue patches) as well as wall deformation, which is the main geotechnical focus.



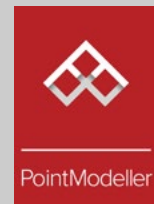
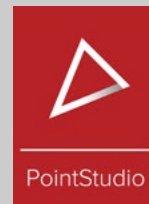
Geotechnical Tools

Specialised tools can be added to PointStudio and PointModeller licences for extracting structures from point clouds and conducting analysis of structural data. Smart tools enable fast and accurate identification and mapping of structures, including the ability to quickly identify and group joint sets as well as record attributes about the structures.

Created stereonetets interactively link to the 3D discontinuities used to create them, enabling users to identify the high risk structures in the real world.

Kinematic analysis options handle planar, wedge and toppling failures with automatic failure zone shading and metrics on high risk structures. Stability analysis is enhanced via a number of advanced analysis features such as the ability to measure waviness, spacing and potential wedge failure size, and identify drilling direction blind zones.

Intuitive tools and workflows combined with true 3D visualisation help operations better understand potential failure zones and manage risks. Detailed visual reports guide design, planning and operational decisions.



Creating accurate waste dump designs

PT Vale employs Maptek™ Vulcan™ for waste dump design at a nickel laterite operation on the island of Sulawesi in Indonesia.



Vale is a global mineral mining company whose subsidiary PT Vale Indonesia Tbk (PTVI) is committed to contributing to Indonesia's sustainable development. PTVI has several mine sites on the island of Sulawesi: Sorowako, Bahodopi and Pomalaa. The operation in Sorowako uses open cast methods to mine nickel laterite ore.

Maptek™ Vulcan™ software has been used by PTVI for many years.

The mining engineers use Vulcan to create top-down waste dump designs that follow the natural shape of the overburden material being dumped at the disposal location. Design considerations include topographical contour and material angle of repose.

The aim is for the design to match the actual waste dump that is being progressively created.

The design process begins with a closed polygon as the top surface of the final waste dump design. This surface (string) is projected downward with a particular batter angle and projection distance. Standard corporate practice is to manually determine the batter angle by looking at the topographic shape. Level-by-level projection is done at 10-metre intervals.

Projection of the top surface is carried out continuously until the final string is completely buried under the topography. A surface triangulation of the waste dump layer is then intersected with the topography.

This design approach is ideal as it closely follows the actual shape of the dump and the top-down dumping method used on site.

Creating a dump design similar to the as-built provides a higher level of accuracy for the planning process.

'We can estimate the capacity of the dump and the flow direction of the material being delivered to the disposal area, allowing us to prevent unwanted flow if necessary,' explained PTVI Mining Engineer, Andrew Christian.

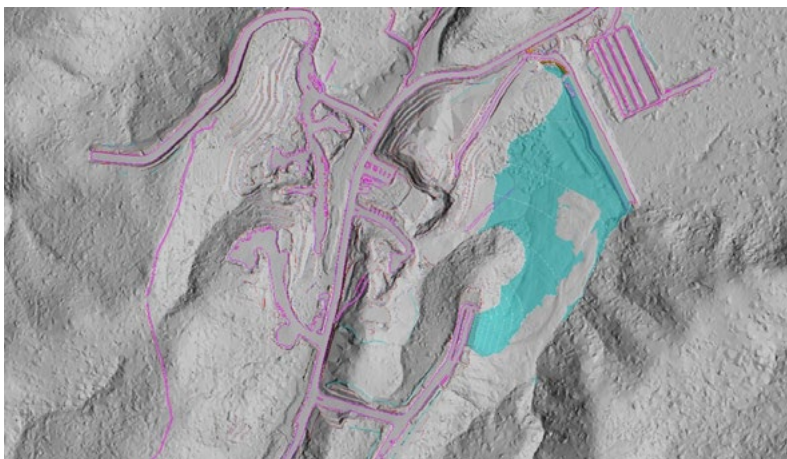
'We can also calculate the maximum dumping limit position at the disposal area following geotechnical assessment, water ponding and hydrological issues at the waste dump area,' he added.

The design can be easily converted to a .dxf extension file for transfer to other teams for their specific geotechnical, hydrological and reclamation needs. In addition, the design can be subtracted from the topographic surface updated weekly.

The value gained from this method is demonstrated by the accuracy of the estimated dump capacity against the actual capacity. If designed properly with the correct projection angles and distances and following the topographical shape, design capacity should be within 80-90% of the actual dump.

Further automating the design process can greatly reduce the time to determine the batter angle of every projection. Maptek looks forward to working with PT Vale to help them generate designs that closely match the as-built dump.

*Thanks to
Andrew Christian
Mining Engineer
PT Vale, Sorowako*



Vision for the future of mining

Maptek™ VisionV2X is a simple solution with an important mission—to help keep all personnel and vehicles safe while working underground.

With VisionV2X, Maptek™ has leveraged vehicle-to-everything connectivity proven to operate reliably underground to develop a non-line-of-sight (NLOS) detection system that meets global EMESRT safety controls. Vehicle operators are alerted when other vehicles and pedestrians come within range, allowing them to take action to avoid collisions.

Keeping people safe

Maptek's development approach has been based on working with sites to understand needs and find the best solution that targets safety and compliance obligations for all stakeholders.

Mine managers, operations managers and shift supervisors can use locational information for decision making, backed by remote visualisation of the mine operations. The underground foreperson has crew safety as a top priority, demanding a system operating with a high uptime so that productivity is not impacted negatively. Heavy vehicle operators underground require reliable systems that provide clear visual and audible awareness of pedestrians and equipment around them.

The tech behind VisionV2X

VisionV2X is designed and developed for underground conditions. The system uses Dedicated Short-Range Communication (DSRC), with metre accuracy and range detection beyond 100 metres out of direct sight.

Long range capability gives vehicle operators enough time to react safely when travelling at the maximum advisable speed.

VisionV2X is independent of external infrastructure—it can operate anywhere in the mine to constantly provide awareness of personnel and vehicles entering at-risk zones.

DSRC is resilient to electromagnetic interference and signal obstruction, transmitting the precise vehicle location, speed and direction many times per second to every other device within range. Automated internal checks ensure that the VisionV2X system is operating correctly.



Installation and usage

VisionV2X can be used on existing and mixed OEM fleets. The robust hardware has minimal components, allowing for easy installation and maintenance.

The rugged HMI tablets are installed in heavy vehicle cabs, with pedestrian location enabled via standard helmet or belt PPE worn underground.

Site implementation involves a proof-of-concept and pilot program with installation, commissioning, decommissioning and performance reports. System training covers the VisionV2X interface and protocols for handling visual and audible alerts indicating at-risk personnel and vehicles.

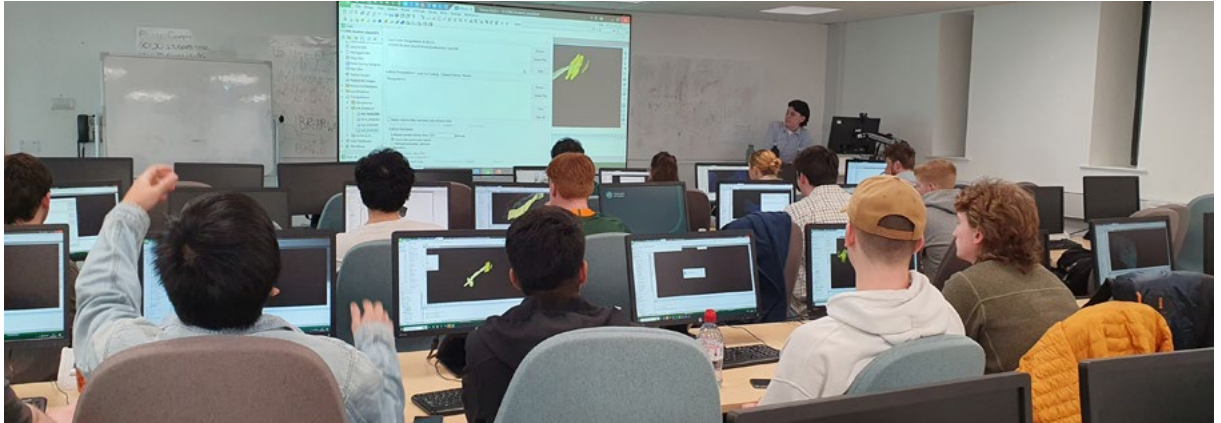
Maptek can configure VisionV2X to site traffic and safety plans, and set up a change management program to ensure a smooth implementation at your site.

Contact Maptek to find out how we can help ensure the safety of your operation.



Training the next generation

Maptek™ provides students at the University of Exeter with experience in industry standard mining technology.



Maptek™ was pleased to provide a training course to students of the MSc Program in Mining and Exploration Geology at Camborne School of Mines (CSM) in April.

Founded in 1888 to train the next generation of miners, CSM today offers undergraduate, postgraduate and research degree programs as part of the University of Exeter.

With several Maptek employees being alumni of the university, the partnership with CSM has grown to be a valued part of our global academic program.

As in previous years, Maptek initially provided access to Vulcan Essentials Online Training, allowing students to become familiar with and customise the user interface.

The following four days of structured in-person training gave the 20 students an insight into geological modelling and 3D mine planning using our software. Feedback from attendees was overwhelmingly positive.

'The course was well structured. The week was very engaging, making the content easy to follow. Maptek gave a great overview of the software applicable to the assignment and its possible use in our careers,' remarked one student.

When asked about the most notable learning points, responses included understanding how sections are used to construct wireframes and learning how block models are created.

A significant takeaway for students was recognising that fundamental errors in data have a considerable impact on models and orebody assessments.

'The course is very beneficial to postgraduate students as they get insights into geological and block modelling using industry standard software. For many, this is a real eye opener to the world of mining and data management,' said Benedikt Steiner, Senior Lecturer and MSc Program Director in Exploration and Mining Geology.

Students enrolled in the course benefit from the lessons in their later careers and employment.

Maptek looks forward to continuing the partnership with CSM, allowing students to gain hands-on experience with industry-leading tools.



Technology management and innovation

Maptek™ supports Mining Engineering students at the University of New South Wales to ensure the sustainability of innovation in the minerals and energy resources industry.



UNSW Sydney School of Minerals and Energy Resources Engineering (MERE) is a leading provider of world-class education and research, and in 2022 ranked 3rd in the QS World University Rankings, and 8th in the Academic Ranking of World Universities.

MERE specialises in undergraduate and postgraduate education, and also produces internationally acclaimed research, working closely with industry to provide innovative solutions to the minerals and energy resources industries.

'The School is at the forefront in creating opportunities for those interested in working towards a sustainable future through new and emerging fields,' said Professor Serkan Saydam, Chair of Mining Engineering.

With the best facilities in resources engineering in Australia, UNSW Sydney researchers and graduates are addressing climate change and future challenges. Areas of focus include transformative technologies, geomechanics and geoenery.

Technology Management in Mining has been part of the coursework program for a long time. In 2023, the name was altered to Technology Management and Innovation in Mining to reflect the innovation needs of the industry.

Approximately 130 students study the Mining Engineering program. Technology Management and Innovation in Mining is one of the most popular courses, with typically 20 students enrolling annually.

Mining production is vital for global socio-economic development and is linked to almost every industry value chain. However, the current sustained global minerals demand, coupled with deeper orebodies, lower ore grades and extreme environmental conditions, presents challenges for the future.

Technology integration is a major aspect of this challenge. Therefore, the course covers different mining operations and core technologies, historical and recent trends in mining technology developments, and the dynamic management needs of changing technologies.

The course is designed to extend traditional learning and stimulate entrepreneurial ideas and 'outside the box' thinking.

Students work individually and in small groups to explore how chosen innovations and new technologies fit within mining operation applications. They then evaluate the ideas through structured technology audits, risk assessments, implementation

plans, capital justification and commercialisation opportunities for both Australian and international mining industries.

The course is coordinated by Professor Serkan Saydam, and presenters include technology experts, technology company leaders and entrepreneurs.

Maptek™ Chairman, Peter Johnson has been contributing to delivery of the Technology Management and Innovation in Mining course for about 5 years.

'We see a great opportunity for the industry. Mining professionals can certainly extract more value from technology solutions already deployed within their working environments, and should be able to achieve more frequent success with technology innovation,' Johnson said.

'A Maptek guiding principle is to walk in the shoes of our customers. So we can't just create the best technology, we need to help them understand how to best apply the solutions for business improvement,' he added.

Working closely with industry is a key contributor to the success of the innovative program.



Solving problems for the future

Maptek™ rewards emerging STEM talent with an annual Computer Science prize for students at the University of Adelaide.



Will Smart is the 2024 recipient of the Maptek™ Computer Science prize, awarded for excellence in second year computer science subjects. The award was presented in May at the University of Adelaide annual prize-giving ceremony by Maptek Head of Experimentation and Technology, Simon Ratcliffe.

Will is currently studying for a double degree, working towards graduating in 2024 with a Bachelor of Engineering (Electrical and Electronic - Honours) and a Bachelor of Mathematical and Computer Sciences.

While he attributes hard work to playing a part in achieving good results, he also acknowledges the importance of doing something you are genuinely interested in.

Will also learnt a lot by taking the time to develop skills through side projects and volunteering expertise.

'Computer Science provides such a variety of different problems to solve. You could be working on a user-friendly GUI one day, and then on a highly performant data processing pipeline the next. There's something for everyone,' he said.

Ratcliffe said that it was always an honour and pleasure to be involved in such presentation events.

'This is even more so when so many of the recipients are familiar faces that have been engaged in Maptek projects during their graduate studies,' he said.

'Partnering between our emerging technical talent, their educational institutions and industry generally is a vital part of growing Australia's

prosperity. I'm sure Will Smart will continue making a significant contribution to this in coming years. Congratulations to him and all the other award winners', Ratcliffe ended.

Will expressed his gratitude to Maptek's support through the award. It has provided an understanding of what achievements are possible with dedication and commitment.

'On a personal note, it has given me a greater level of confidence in my abilities and will help overcome the imposter syndrome that is often felt as a young professional entering the workforce', he said.

Will's internship experiences have ranged across several unrelated areas.

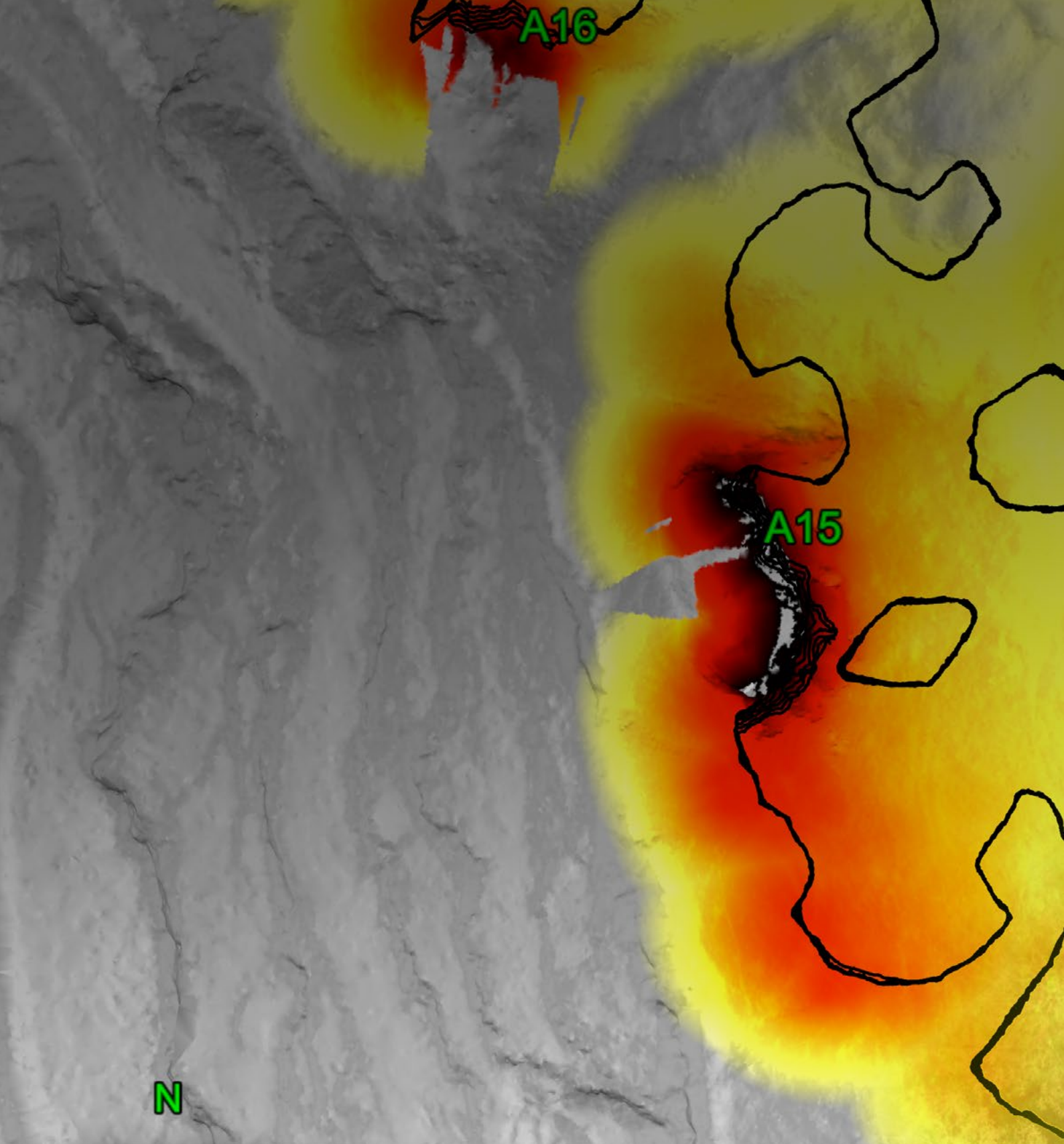
'I enjoyed them all, and my dream career sits somewhere at the intersection of hardware and software', he concluded.

Maptek enjoys seeing students thrive and anticipates interesting career opportunities opening up in computer science and technology.



Once again, a team of Maptek interns won the Software Engineering prize for their capstone subject — pictured with their supervisors, Simon Ratcliffe and Will Reid.





www.maptek.com

Maptek Forge newsletter is published each quarter. You can receive it by mail or emailed link to the Maptek website. Email forge@maptek.com to subscribe or advise changes to contact details. Articles may be reproduced with acknowledgement. ©2024 Maptek