



MATTHEW DE FRANCIA

Mining Engineer

BEng (Mining) – University of Queensland
BSc (Physics) – University of Queensland



Matthew has been a part of the mining industry since 2016, working on various open cut coal operations with experience in mine planning and design. During his time with Xenith he has worked with a wide range of coal mines and deposits making him a versatile and valuable planning resource.

Expertise

- **Long Term Planning:** LOM equipment scheduling with dig, dump and haulage
- **Mid Term Planning:** Planning of 26 week to 5 year prestrip and dragline strategies
- **Dragline and Dozer Modelling:** Design of dragline and bulk dozing methods for single and multi-seam operations
- **Reserving and Reconciliation:** JORC reserving, mid term dig and dump reserving, and annual OBIA reconciliations
- **Mine Operation:** Coal stockpile verification in Vulcan, rehabilitation plans in 3D-Dig
- **Mine Design:** Mid and long term dig and dump designs
- **Mining Software:** 3D-Dig, DeswikCAD, Deswik Dragline, Vulcan, Spry, Dragsim, Ventsim, Autocad, Whittle
- **Programming:** C, C#, VBA, Neural network programming.

Career Highlights

- **Xenith Consulting:** Detailed equipment scheduling in Spry for a complex multi-seam deposit.
- **Downer Group:** Created software scripts for the optimisation and validation of mining operations. Added functionality to haulage analysis scripts
- **University of Queensland:** Developed an artificial neural network to optimise truck haulage fuel consumption in an underground mine.

Professional Experience

Mining Engineer	2017 – Current	Xenith Consulting Pty Ltd
Undergraduate Mining Engineer (Boggabri Coal Mine)	2016	Downer Group
Research Assistant	2015 – 2016	University of Queensland – Department of Mining