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:** Scheduled life of mine plans with work in equipment scheduling, dumping and haulage
- **Mid Term Planning:** Designed prestrip and dragline strategies from a mid term perspective
- **Dragline and Dozer Modelling:** Design of dragline and bulk dozing methods for single and multi-seam operations
- **Reserving and Reconciliation:** Generated JORC reserves and performed annual OBIA reconciliations
- **Mine Operation:** Validated coal outputs in Vulcan. Developed software scripts for improving operations analysis
- **Mine Design:** Created dig and dump designs across the long term and mid term levels of detail
- **Mining Software:** DeswikCAD, Vulcan, Spry, Dragsim, Ventsim, Autocad, Whittle
- **Programming:** C, C#, VBA, Neural network programming.

Career Highlights

- **Xenith Consulting:** Life of mine scheduling of complex, multi-seam deposits in Spry while upskilling in the software during the project. Performed midterm dragline and prestrip planning at Blackwater mine.
- **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**