



**LUKE BESSE**  
Senior Mining Engineer

BInfoTech – University of Queensland  
Graduate Diploma Mining – Curtin University

Luke has worked in the mining industry since 2008, primarily in consulting, using a variety of commercial and proprietary software solutions for reserve generation, margin ranking, and data analysis. Luke has also worked on-site in short-term scheduling roles and has experience in the design and planning of dragline operations. Luke’s background in programming and IT also stands him in good stead to streamline many mine planning processes.

**Expertise**

- **Project Management:** Detailed report writing and development of presentations
- **Dragline Design:** Planning and design of dragline strips using 3d-Dig
- **Dump and Rehabilitation Planning:** Development of optimised truck dumps and rehabilitation plans using 3d-Dig
- **Reserves Estimation:** Preparation of plans and figures for use in JORC reporting
- **Mine Scheduling:** Long term mine scheduling of a large scale Surat basin coal project, medium term and short term scheduling in Xpac. Development of stand-alone path generator to streamline Xpac scheduling
- **Design:** Development of software solutions tailored for specific mine planning requirements
- **Information Management:** Derivation of mine planning reserves databases from raw geological data with specific expertise in heavily faulted deposits
- **Software Proficiency:** Minex, Deswik.CAD, Xpac, Autocad, xTract, 3d-Dig, Vulcan
- **Programming:** C#, VB.NET, Ruby, Java, VBA, Xpac XCM Programming.

**Career Highlights**

- **Xenith Consulting:** Updated in-house mine modelling software to allow for modelling and scheduling of reserves with unusually complicated geological conditions. Added reporting functionality and basic mobile equipment scheduling capability. Created an entirely new medium-term Xpac scheduling model
- **Wesfarmers Curragh:** Responsibility for 16-Week Schedule of major activities at Curragh. Also worked as dragline planning engineer, designing dragline strips in a multi-seam stacked environment, using Vulcan and 3d-Dig
- **Arup:** Created a 3D animated model for the Safelink Ipswich Motorway upgrade, which was featured in several media reports, with images published in the UK’s AEC magazine.

**Professional Experience**

Senior Mining Engineer	2018 – Current	Xenith Consulting Pty Ltd
Mining Engineer	2013 – 2018	
Scheduling Engineer / Dragline Planning Engineer (Wesfarmers Curragh – on secondment)	2012 – 2013	
Mining Analyst	2008 – 2013	
Technician / Junior Civil Designer / CAD Support	2006 – 2008	Arup