

## CURRICULUM VITAE

**NAME:** JOCK ALLEN FARRINGTON

**YEAR OF BIRTH:** 1990

### ACADEMIC QUALIFICATIONS:

Bachelor of Engineering                      2012   University of Southern Queensland  
Mechanical - 1<sup>st</sup> Class Honours

### AWARDS:

- 2011   Wilmoth Medal and Prize, Engineers Australia, University of Southern Queensland
- 2011   IMechE Best Mechanical Engineering Final Year Project, University of Southern Queensland
- 2009   Warman Student Design and Build Competition, Engineers Australia; 1st on Campus, 5th National Finals
- 2008   Regional Scholarship, University of Southern Queensland

### CAREER APPOINTMENTS:

- 2013 –                      Research & Development Engineer, Gilmore Engineers|e3k Global
- 2012 – 2013              Measurement While Drilling Engineer, PathFinder Australia, Schlumberger Ltd.
- 2011 – 2012              Drafter, GCtec Consulting

## BIOGRAPHICAL NOTES

Jock Farrington is a Research and Development Engineer with e3k, the New Product Division of Gilmore Engineers Pty Ltd, Research, Development and Commercialisation Specialists.

He received his Bachelor of Mechanical Engineering degree in early 2012, from The University of Southern Queensland, Australia.

Mid 2012 saw Jock join PathFinder Australia, a major Directional Drilling company in Australia, as a Measurement While Drilling Engineer (MWD). This is part of Schlumberger Ltd., the global oilfield service company. Jock's key role in this job was providing assistance in the rig site operation of high technology drilling surveying and formation evaluation equipment used in the upstream oil and gas industry. While employed he dealt with identification and analysis of problems associated with the preparation and operation of equipment; maintenance of appropriate stock and equipment levels; communication and negotiation with client representatives and supervisors; assistance in the completion of relevant documentation and inventory procedures; and proactive participation in the company's safety management system.

In 2013, Jock joined Gilmore Engineers Pty Ltd|e3k Global as a Research and Development Engineer. He has worked on numerous design projects and developed expertise in concept generation and engineering analysis, three dimensional computer modelling, prototype testing, and Computational Fluid Dynamics (CFD).

e3k specialises in Industrial Research and Development, particularly New Product Development and Commercialisation. This activity requires a broad knowledge of engineering, from which ideas and fresh approaches to problem-solving can be drawn.

Complete products which satisfy an identified market and consumer demand are created from initial concepts, or partially developed devices. This requires a highly creative and experienced approach, together with cross-fertilisation of ideas from other disciplines to enable them to be world competitive and suitable for export. A complete idea-generation, design, prototype development and testing service is provided. Commercialisation and manufacture of the product is considered constantly with assistance being given in protecting Intellectual Property, conducting market research, liaison with regulatory authorities, and importantly interacting with sources of finance.

e3k has been the recipient of 6 Engineering Excellence Awards from Engineers Australia. e3k was a National Winner in 2012, as well as taking 3 Awards in the Newcastle Division, including the GHD Overall Winner, and the UGL Innovation in Sustainable Engineering Award for engineering design and testing of the SeaUrchin marine power generator. e3k received a High Commendation in 2001 and was a finalist in 2010 in the Queensland Division Awards with projects sponsored by the Queensland Academy of Sport and Leighton Contractors Pty Ltd respectively.

Jock's first major project with e3k was in 2013 where he was involved in the development of a design concept and physical prototype for an innovative mechanical device for use in disabled bathrooms.

In February 2014, Atlantis Resources Limited, a company grown from the technology developed by e3k in the years 2000 to 2004, was admitted to trade on the London Stock Exchange. The world-patented technology now part-owned by Morgan Stanley, relates to underwater tidal renewable power generation turbines.

In 2014 Jock assisted in the CFD evaluation of the flow behaviour within a municipal water storage tank in the Middle East, analysis and assessment of a new SAG mill design along with the formulation of a lifting strategy for a large 300 tonne feeder for a mine in Papua New Guinea, as well as the design and initial performance evaluation of a heat exchanger system for Formula 1 vehicles.

2015 saw Jock involved in the CFD analysis of a large scale livestock shelter to evaluate ventilation performance, design auditing of a new model of commercial dishwasher, and the detailed design of adjustable work-platforms.

In 2016, e3k expanded its Project Engineering activities internationally and Jock was part of the team which conducted the lead contractor role for the repair of a stainless steel lined concrete tank in Laos, SE Asia, which was leaking acid, as part of a 5 day total plant shut. Other 2016 projects Jock worked on included multiphase CFD analysis of an anaerobic sewage digester tank, Finite Element Analysis (FEA) of a modular water tank, and the feasibility study of an innovative fluid transport tank.

Since beginning work with Gilmore Engineers Pty Ltd|e3k Global Jock has also been involved in the calculation and reporting of building product thermal resistance (R value) for many clients.

Over the past 2 years Jock has been involved in ongoing Research and Development of the medical device named "Agilitas" which was originally launched for commercial sale by Bright Devices Pty Ltd in 2013. It is a "smart" visual cueing device designed to assist persons suffering primarily from 'Freeze of Gait' associated with Parkinson's Disease. He has gained expertise in C, Java and XML programming as well as basic microelectronics assembly.

As part of the Gilmore Engineers Pty Ltd team, Jock investigates incidents and prepares expert engineering evidence for the legal profession of Australia. This evidence, provided by Gilmore Engineers Pty Ltd, has ranged from detailed failure analysis of major industrial accidents, to motor vehicle accident re-construction and personal injury.