

NAME: JESSICA LAUREN KELLY

ACADEMIC QUALIFICATIONS:

Bachelor of Engineering 2015, University of Queensland, St Lucia
(Mechanical) – Honours Class I

PROFESSIONAL QUALIFICATIONS:

Member, Engineers Australia

AWARDS:

2015 Dean's Commendation, University of Queensland
2012 Dean's Commendation, University of Queensland

CAREER APPOINTMENTS:

2019 –	Research & Development Engineer, Gilmore Engineers e3k Global
2018 – 2019	Noise, Vibration & Harshness CAE Engineer, Ford Motor Company
2017 – 2018	Design & Release Engineer (Driveline), Ford Motor Company
2016 – 2017	CAE Integration Analyst, Ford Motor Company
2014 – 2015	Undergraduate Mechanical Engineer, Origin Energy

BIOGRAPHICAL NOTES

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

She attained her Bachelor of Mechanical Engineering degree in 2015, with First Class Honours from The University of Queensland, Australia. She completed her undergraduate thesis in Hybrid Renewable Energy Systems.

In 2016, Jessica joined the Ford Motor Company's Asia Pacific Product Development Centre, based in Melbourne, Australia, as part of the Automotive Engineering Graduate Program. Working in the Product Development division, she worked on the development of the Ford Ranger, Ford Everest & Ford Bronco vehicles in a variety of roles.

Initially working as a CAE Integration Analyst, Jessica was responsible for the coordination and integration of inputs for simulated vehicle models. This involved developing a deep understanding of the quality and fidelity requirements for high quality Finite Element Analysis – as well as working with multi-disciplinary and international teams across China, India, USA and Australia.

As a Design & Release Engineer, Jessica was responsible for the total engineering design of the transmission, transfer case and axle breather hoses. Jessica developed a wide range of engineering experience and was responsible for the end to end design process for these parts including; concept development, engineering analysis, geometric packaging, quality and Design Failure Mode and Effect Analysis (DFMEA) assessments, financial approvals, part tooling, prototype testing, issue root cause analysis & resolution and global assembly plant integration.

As a CAE Engineer working in Noise, Vibration and Harshness, Jessica began to specialise in simulation, virtual analysis and finite element analysis tools. She was responsible for building, debugging and analysing vehicle models in various FEA and CAE packages, then interpreting the simulation results to understand the noise, vibration and harshness impacts for the customer from potential designs.

In 2019, Jessica joined Gilmore Engineers Pty Ltd/e3k Global as a Research and Development Engineer. She has worked on numerous design projects, notably a major project with an international mining Company, and developed expertise in concept generation and engineering analysis, CAD modelling, prototype testing, project management 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.