

# CURRICULUM VITAE

**NAME:** Kieren Petty

**YEAR OF BIRTH:** 1989

## ACADEMIC QUALIFICATIONS:

Bachelor of Engineering Science 2015 The University of Queensland

Master of Engineering Science 2020 The University of Queensland

## PROFESSIONAL QUALIFICATIONS:

Member, The Institution of Engineers Australia

## CAREER APPOINTMENTS:

2023- Research and Development engineer, Gilmore Engineers Pty Ltd|e3k

2022-2023 Design engineer, Everhard Industries

2020-2021 Hydraulic engineer, Storm Water Consulting

2019 Software Engineer, Storm Water Consulting

2017-2018 Graduate Electrical Engineer, Wood and Grieve Engineers

## BIOGRAPHICAL NOTES

Kieren joined Gilmore Engineers Pty Ltd | E3K as a Research and Development Engineer in 2023. Kieren has had a variety of experiences in different engineering disciplines. Most recently, Kieren has worked for an Australian manufacturer, developing new products from concept to completion.

Kieren received his Bachelor of Engineering with an extended major in Mechatronic Engineering from the University of Queensland in 2015. He completed a Master of Engineering Science in Materials and Manufacturing Engineering in 2020 from the University of Queensland. His undergraduate thesis focused on using computational methods to analyse in situ combustion efficiency using infrared spectroscopy. Kieren's postgraduate thesis focused on the biodegradability of biodegradable polymers in an anaerobic environment.

In 2023 to date, Kieren has been involved with articulated haulier's superstructure redesign and computational fluid dynamics (CFD) modelling. The articulated haulier redesign involved strategic design choices to permit the highest superstructure payload without compromising the manufacturer's modification limitations. The CFD simulations involved iterative modelling of siphon designs to replicate and predict actual behaviour.

In 2022, Kieren began working as a design Engineer at Everhard Industries (EI). Throughout his tenure at EI, he was involved in designing, developing, and implementing multiple products. These products were made from precast concrete, injection moulded polymer, and rotomolded polymer products. He developed skills in Finite Element Analysis (FEA), design for manufacturing (DFM), and project management.

In 2019, Kieren was engaged by Storm Water Consulting (SWC) to update and develop key software applications for their business. He was able to implement the desired improvements, which significantly reduced SWC's labour costs through a reduction in repetitive menial tasks, future-

proofed their business, and provided SWC with a competitive edge against their opposition. Kieren later transitioned to a Hydraulic Engineering role at SWC in 2020. In this role, he excelled at creating and analysing flood models. He was able to develop skills in creating formal report documentation and managing client expectations.

In 2017, Kieren worked as a Graduate Electrical Engineer at Wood and Gieves Engineers, now a part of Stantec. Here, Kieren worked in building services, providing drafting and engineering support to the project engineers. This included working on an energy audit and providing energy-saving recommendations for Brisbane City Council pool operators. Through this experience, Kieren practiced key skills relating to project management, design principles, and stakeholder engagement.