

100

CELEBRATING
OUR CENTENARY



ENGINEERS
AUSTRALIA

Research Higher Degree Projects

Risk Engineering Society

Your opportunity to hear from a host of PhD students in an informative evening of presentations based risk engineering concepts.

5.30 - 7.30pm | Tuesday 19 November 2019

Hawken Auditorium
Level One, 447 Upper Edward Street, Brisbane, QLD 4000

A number of soon-to-graduate research higher degree students will present their PhD findings in this informative evening of presentations.

Each of these sessions, held in the Hawken Auditorium at Engineers Australia Queensland's headquarters, will go for 15 minutes apiece with a further five minutes allowed for questions.

The presentation's topics will be based on a variety of different aspects of risk engineering.

Your presenters, who are also full-time engineering professionals with a host of diverse experience across numerous disciplines, are all PhD students attending the University of Queensland.

For more information about the presenters, please see the next page.

TICKETS (INCL. GST)

EA & Society Member \$25

Student Member

COMPLEMENTARY

Non-member \$55

PRESENTED BY

Nik Ryback

Jamie Cadena Gomez

John Lee

Kourosh Parsa

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Meet your presenters and their topics.



Nik Ryback

“Leveraging deep learning for drowsiness detection”

Nik is a machine learning and computer vision researcher at the University of Queensland (ITEE and Chemical Engineering) with more than six years' industry experience in research and development.

In 2016, he held an Affiliate Researcher position at the University of California San Diego, Department of Computer Science and Engineering (CSE), Machine Perception Laboratory, where he developed algorithms for facial expression recognition and voice signal analysis for robotic platforms.

His work is strongly interdisciplinary. It concerns using deep neural networks and other complex computational models applied to problems in artificial intelligence and cognitive sciences.



Jamie Cadena Gomez

“Fire risk assessment for the retrofit of a highrise building with a façade”

Jamie's educational background lies in chemical engineering and is backed by a Master's research degree focused on fire dynamics and fire safety engineering.

He has worked in risk management and mechanical integrity within the oil and gas and chemical industries and has provided consultancy for several private organisations, as well as for the Colombian government.

In the course of ten years, he has always thrived to learn more about a complex and fascinating field, leading to the start of his PhD in the University of Queensland in the topic of fire risk assessments.





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John Lee

“The use of dynamic models to improve process safety”

John worked for BP Oil for 29 years in roles including Operations Manager and Safety and Operational Risk Entity Director at BP Bulwer Island Refinery and Operations Manager at BP Kwinana Refinery.

He graduated from the University of Queensland (UQ) in 1987 and is a Fellow member of IChemE, and commenced his full-time PhD at UQ in August of 2017.

John has co-authored several papers relating to computational fluid dynamics for fluid catalytic crackers (CHEMECA 'John A Brodie' medal in 2006 and CSIRO Best Paper 2007). He has also co-authored several papers relating to Blended HAZID.



Kourosch Parsa

“Methods to evaluate alarm system design and to priorities and rationalise alarms to increase operator situation awareness and assist operator decision-making”

Kourosch is a qualified Systems Engineer with a background in electrical engineering, ICSS and systems engineering across a range of oil and gas, refineries, petrochemical plants, water and wastewater as well as manufacturing and railways.

He is currently completing his PhD in Systems Engineering at the University of Queensland. Kourosch also has experience in functional safety and functional security including qualitative and quantitative reliability analysis, RAMS engineering, systems modelling, risk mitigation and operations optimisation, HAZOP, HAZID, LOPA, SIL study, systems and software safety, assessment and verification, cyber threat studies.

Kourosch has also undertaken project engineering, project management and construction engineering roles.

