PhD Research Internships – eSMART21

The Adelaide Graduate Research School (AGRS), in partnership with Australian tech company eSMART21, is offering an internship opportunity for a PhD student working in the fields of Computer Science, Artificial Intelligence and Software Engineering.

eSMART 21 is an Australian based tech company specialising in innovative smart parking technologies for local government and emerging smart cities. Established in 2010 by Jega Balakrishnan, eSMART 21 has developed products that are revolutionising parking management, including MetroPark - a convenient app that helps drivers find and pay for vacant parking all from their smartphone, and AutoFine – an IoT based automated car park monitoring and enforcement system for on street parking area.

AutoFine technology uses camera and sensor technologies to automate car parking monitoring and enforcement process. This technology generates a large amount of visual data that may involve identifiable human figures that may lead to a potential privacy concern.

About the project

This research internship has been established to provide a PhD student undertaking research in the field(s) of computer science and software engineering, the opportunity to undertake research and developmental activities to proof the concept of fast facial detection and blurring techniques using deep learning and AI detectors to address potential privacy concerns.

The nature of research and development activities for this research internship may include:

• Literature review on facial detection and blurring techniques

• Reviewing visual data set

• Evaluation and implementation of suitable facial detection and blurring detectors

• Code documentation and report writing on findings and recommendations

Expected research outcomes for students may include:

• Engaging in solving a real world problem requiring a real solution

• Assisting the organisation in solving a unique vision processing challenge

• Gaining professional industry experience

• Applying research skills to explore and develop a cost effective and reliable AI image processing tool

• Learning about AI application for a bespoke automated IoT solution

The selected applicant, their supervisor, and eSMART21's contact person will have the opportunity to discuss the nature of research and development activities and working arrangements post-selection.

The proposed commencement date is 15 January 2023.

Eligibility requirements

The PhD student must be:

• within the first 18 months of their candidature,

• willing to undertake the research internship with eSMART21 for a minimum duration of 60 FTE business days,

• making satisfactory progress, and

• undertaking research in an area aligned with the proposed research internship projects.

More information about University of Adelaide's Research Internships is available here.

Application process

To apply, please email the following documents to hdr_internships@adelaide.edu.au (HDR Internships Office) with the subject line - eSmart 21 Internship

- Resume (include knowledge of any Computer Language and .Net technologies)

- Cover Letter (of not more than 2 pages) outlining your interest in the internship and describing how your background and research area align with the proposed field of research internship.

Application closing date: 5 January 2023

Further enquiries

Email: hdr_internships@adelaide.edu.au