GERARD KENNEDY

Website: https://kennege.github.io
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OVERVIEW

I am a Masters student with the Australian Centre for Robotic Vision and the Australian National University. My project involves developing novel ways of applying deep learning algorithms to robotic vision applications. I previously completed Bachelors degrees in Engineering and Science at the Australian National University. I intend to write up my Masters thesis in my own time in the first half of 2021. I am currently seeking full-time work and can start at short notice.

EMPLOYMENT

Tutor/Teaching Assistant 2017 - 2020
Australian National University

Courses: Systems Engineering Design (ENGN2225), Systems Group Project (ENGN4221), Robotics (ENGN4627), Computer Vision (ENGN4528).

Research Assistant 2018 - 2019
Australian National University

I assisted in the development of the vision system for an agricultural harvesting robot, and in the development of a novel simultaneous localisation and mapping algorithm.
Required skills: Matlab, Python, C++, BASH, ROS, Ubuntu

Summer Research Scholar 2015 - 2016
CSIRO, Scientific Computing Section, Canberra

I developed automated hardware and software testing regimes to be implemented on the CSIRO's high performance computers.
Required skills: BASH, C#, C++, Ubuntu
Publication: https://conference.eresearch.edu.au/2018/09/hpc-software-image-test/

EDUCATION

Master of Philosophy 2019 - Feb 2021 (expected)
Australian National University & Australian Centre for Robotic Vision
My project involves developing novel deep learning algorithms for use in robotic vision applications.
Research areas: Robotics, Computer Vision, Robotic Vision
Required skills: Python, C++, Matlab, Ubuntu, ROS, Pytorch, Deep Learning, Machine Learning
Publications: https://scholar.google.com/citations?user=YXhev9oAAAAJhl=en

Bachelor of Engineering (Honours) 2013 - 2018
Australian National University
Majors in Mechatronic Engineering, Systems Engineering
First Class Honours
Thesis: https://kennege.github.io/files/thesis_2017.pdf

Bachelor of Science 2013 - 2018
Australian National University
Major in Mathematics
Minors in Physics, Earth Science

AWARDS

Australian Government Research Training Program Scholarship	2019 - 2021
Postgraduate Research Scholarship (Australian Centre for Robotic Vision)	2019 - 2021
Discovery Translation Fund (Australian National University)	2018
Chancellor's Letter of Commendation (Australian National University)	2017
CSIRO Summer Research Scholarship	2015

PROJECTS

Camera-Robot Calibration 2020

Australian Centre for Robotic Vision

I collaborated with another student to develop and document an open-source software package for calibration of a multi-camera system with a UR5 robotic arm.
Software & Documentation: https://kennege.github.io/projects/calibration/
Required skills: Python, ROS

Asparagus Harvesting Robot 2018

Australian Centre for Robotic Vision

I was part of a team that began the development of a robotic platform for harvesting asparagus. My role involved developing a prototype vision system.
Project Summary: https://kennege.github.io/projects/asparagus-harvester/
Required skills: C++, Matlab, BASH, Ubuntu

Control System Developer 2017

ANU Sol Invictus Solar Car Project

I was a member of the ANU team for it's first entry in the World Solar Car Challenge. I developed the car's data logger and designed and arranged manufacture of printed circuit boards (PCBs) to be used in the car's steering wheel, throttle control, and battery mount.
PCB Designs: https://github.com/kennege/solar-car/
Required skills: C#, Altium Designer

MISC.

Robotic Vision Summer School Workshop Coordinator	2020
Associate Fellowship of the Higher Education Academy (AFHEA)	2018
CSIRO ONPrime Completion	2018
Fifty50 First Year Mentor	2017
Campus Coordinator for Engineers Australia	2016

REFERENCES

Robert Mahony
Professor, Research School of Engineering, Australian National University
Rob is a Chief Investigator for the Australian Centre for Robotic Vision and the head supervisor for my Masters research project.
robert.mahony@anu.edu.au
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Steve McMahon
HPC National Partnerships Advisor, CSIRO
Steve was the supervisor for my Summer Research Project in 2015/2016.
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