Hayden Faulkner

PhD Student

Designing and implementing state-of-the-art machine learning techniques to understand and process large volumes of video data.

The Australian Institute for Machine Learning
The University of Adelaide
with Data To Decisions CRC
Adelaide, Australia

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Education

The University of Adelaide
PhD in Computer Science

MARCH 2015 - CURRENT

Topic: Event Detection, Recognition & Summarisation from Video
Supervisors: Prof. Anthony Dick, Prof. Anton van den Hengel

Honours in Computer Science

MARCH 2014 - OCTOBER 2014

Result: First Class, with highest mark amongst peers
Thesis: Visual Tracking for Application to AFL Football
Supervisor: Prof. Anthony Dick

Bachelor of Computer Graphics

MARCH 2010 - OCTOBER 2012

GPA: 5.625

Flinders University
Graduate Certificate in Creative Arts (Visual Effects)

FEBRUARY 2013 - JULY 2013

In conjunction with Rising Sun Pictures

Publications

TenniSet: A Dataset for Dense Fine-Grained Event Recognition, Localisation and Description
2017, Digital Image Computing: Techniques and Applications (DICTA)

Approximate Approaches to the Traveling Thief Problem
2015, Genetic and Evolutionary Computation Conference (GECCO)

A Study of the Region Covariance Descriptor: Impact of Feature Selection and Image Transformations
2015, Digital Image Computing: Techniques and Applications (DICTA)

AFL Player Detection and Tracking
2015, Digital Image Computing: Techniques and Applications (DICTA)

Skills

Computer Vision

Machine Learning

Neural Networks

Application Development

Communication + Visualisation

Coding

Current Proficiency
Python, MXNet, PyTorch, Keras, Matlab

Past Proficiency
HTML, CSS, PHP, Javascript, Java, C/C++

Awards

PhD Top-Up Scholarship (2015-2018)
Data To Decisions CRC
15,000AUD annually

Google Prize in Honours (2014)
Awarded for highest annual mark

Three Minute Thesis Winner (2015, 2017)
Amongst Data To Decisions CRC national student base

Links

Personal
GitHub
LinkedIn
Twitter