

Le Louëdec Justin

PHD STUDENT (PENDING VIVA) · COMPUTER SCIENCE

Looking for new Home

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Summary

After a Master's degree at Université Grenoble Alpes, I started a PhD in computer science at the University of Lincoln. My work was centred around 3D computer vision for robotics perception and agronomy/biology applications. I am now looking for a postdoc position in computer vision or machine learning applied to new exciting challenges in robotics, life and physical sciences. My interests lie mainly but not only in:

- 3D multi-modal vision.
- Single view reconstruction with parametric models.
- Simulation-driven learning.
- Neural field and implicit representation.

Experience

Inria, Grenoble

MASTER THESIS RESEARCH INTERNSHIP

Grenoble, France

Feb. 2018 - Jul. 2018

- Proposing a Deep learning model capable of predicting chess player's visual attention.
- Work published at the ACM Symposium on Eye Tracking Research and Application (ETRA 2019).
- **Tools:** Python, Pytorch

LIGLab, Grenoble

TRAINING RESEARCH INTERNSHIP

Grenoble, France

Second academic semester, 2017

- Gesture recognition using Deep Learning methods
- Proposed a trained model capable of distinguishing between a set of 5 different gestures and able to detect if any gesture is done.
- Deep testing and analysis done on a dataset created by the team.
- **Tools:** Python, Pytorch

ILL Grenoble

SOFTWARE ENGINEER INTERNSHIP

Grenoble, France

Apr. 2015 - Jun. 2015

- Creating monitoring software for RS-232 serial port to help IT teams to create experimentation on Neutrons.

Education

University of Lincoln

PHD COMPUTER SCIENCE

Lincoln, England, United Kingdom

Sep. 2018 - 2022 (Pending Defence)

- Vision system using machine learning method for soft fruit detection and shape estimation, based on 3D information

Université Grenoble Alpes

MASTER OF SCIENCE IN INFORMATICS (MOSIG), COMPUTER SCIENCE (MSc)

Grenoble, France

Sep. 2016 - Jul. 2018

Napier university

BSc, COMPUTER SCIENCE

Edinburgh, Scotland, United Kingdom

Sep. 2015 - Jul. 2016

IUT2 informatic, Université Grenoble Alpes

DUT, SOFTWARE ENGINEERING

Grenoble, France

Sep. 2013 - Jul. 2015

Lycée d'altitude

BACCALAURÉAT, ENGINEERING SCIENCE SPECIALIZED IN PHYSICS

Briançon, France

Sep. 2010 - Jul. 2013

Publications

0.1 Conferences

Deep learning investigation for chess player attention prediction using eye-tracking and game data

ETRA 2019

J LE LOUEDEC, T GUNTZ, JL CROWLEY, D VAUFREYDAZ

2019

- ACM Symposium on Eye Tracking Research and Application (ETRA 2019)
- Proposing a Deep learning model capable of predicting chess player's visual attention

Evaluation of 3D vision systems for detection of small objects in agricultural environments

VISAPP 2020

J LE LOUEDEC, BO LI, GRZEGORZ CIELNIAK

2020

- 15th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2020)
- Studying semantic segmentation of point-clouds for an agricultural context

Segmentation and Detection From Organised 3D Point Clouds: A Case Study in Broccoli Head Detection

CVPR Workshops

J LE LOUEDEC, HA MONTES, T DUCKETT, G CIELNIAK

2020

- Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops

Determining shape of strawberry crops with spherical harmonics

UKRAS

J LE LOUEDEC, G CIELNIAK

2020

- UKRAS (Robotic and autonomous systems)

Real-time detection of broccoli crops in 3D point clouds for autonomous robotic harvesting

IROS

HA MONTES, J LE LOUEDEC, G CIELNIAK, T DUCKETT

2020

- IEEE/RSJ International Conference on Intelligent Robots and Systems

Gaussian map predictions for 3D surface feature localisation and counting

BMVC

J LE LOUEDEC, G CIELNIAK

2021

- The British Machine Vision Conference

0.2 Journals

3D shape sensing and deep learning-based segmentation of strawberries

CompAg

J LE LOUEDEC, G CIELNIAK

2021

- Computers and Electronics in Agriculture

Skills and interests

Programming

- C/C++
- Python
- Machine learning framework : Pytorch
- Miscellaneous : Assembly, databases, web languages etc.

Languages

- French : mother tongue
- English : fluent
- Spanish : basics

Sports and activities

- Skiing, skiing touring, cross-country skiing

- Running, trail running, hiking and trekking
- Mountain biking
- Crossfit
- Photography, Art

Reviewing work

2020	IEEE , CVPR Workshop on computer vision for agriculture	<i>Conference</i>
2020	PLOS ONE , PLOS ONE journal paper	<i>Journal</i>
2020	IEEE , IEEE Image processing	<i>Journal</i>
2021	Elsevier , Computer and electronics in agriculture	<i>Journal</i>
2021	ICLR , ICLR 2022, mentee reviewer	<i>Conference</i>
2022	IEEE , Robotics and Automation Letters	<i>Journal</i>
2022	NEURIPS , NEURIPS	<i>Conference</i>
2022	IEEE , RA-L - IEEE Robotics and Automation Society	<i>Journal</i>