

Centre for Image Processing & Analysis

Research Focus: Computer Vision

Automated Image Processing, Feature Segmentation Quantitative Analysis



Research Group

Team led by Prof. Paul Whelan, Professor of Computer Vision, with over 27 years experience in developing computer vision solutions in industry and academia.

22 members including 3 faculty and 7 staff and Adjunct Members and Visiting Researchers

Core Expertise

Design and development of novel computer based solutions enabling automatic extraction of key image features with a view to a robust and reliable quantitative analysis, classification or tracking of key data within the scene.

3 Key Application Areas



Consumer



Industrial



Bio-Medical

Commercial Experience

Two start-up companies: Spin-out Jaliko and student start-up Exraylab
7 Patent Applications Filed
3 Commercial Licences



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Industry Collaborations

Current Innovation Partnership with Reprodac

Innovative use of ultrasound to automatically manage reproduction in cattle



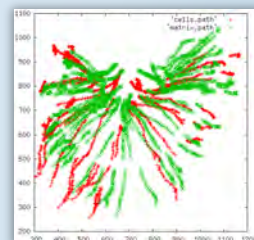
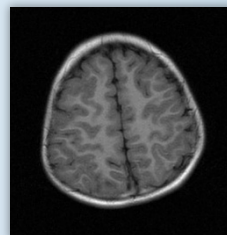
Examples of Ongoing Research

Spectral Mesh Processing for 3D Craniofacial Dysmorphology

White Matter Volume assessment in premature infants on MRI

National Biophotonics & Imaging Platform:

- Tracking in Cellular and Molecular Biology
- Automated Segmentation/Classification of Mitochondria from TEM Images,
- CAD for Ultrasound of the Carotid Artery



Where could CIPA expertise help other businesses

Diverse imaging expertise, tools and techniques that can be deployed across a wide range of sectors

High level applications include: key feature/event detection, controlling processes, automatic inspection, video tracking, motion analysis, image restoration, surveillance, computer aided diagnosis

As engineers, CIPA's focus is on developing reliable and robust computer vision solutions.