BIVLab

Biomedical Imaging, Vision and Learning Laboratory

The best lab ever

bivlab@uis.edu.co

April 27, 2019

Universidad Industrial de Santander

BIVLab

Table of Contents I

BIVLab

Research Interests

- **Imaging and Inverse Problems**
- Motion Understanding
- Learning and Image Representation

BIVLab

Research Interests

People

Lola Bautista, PhD

Fabio Martínez, PhD

PhD Students
Master Students
Bachelor Students

Research Interests

Imaging and Inverse Problems

- Image Formation Models
- Image Reconstruction
- Biomedical Image Reconstruction

Motion Understanding

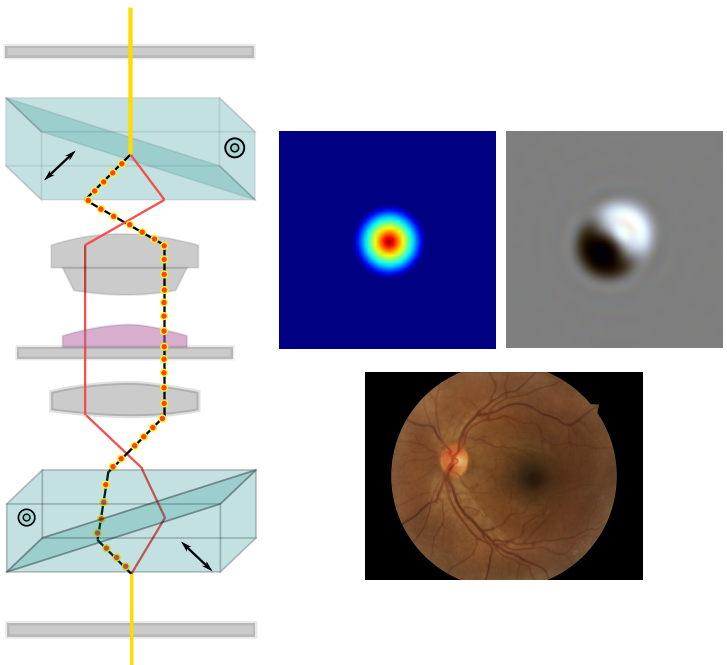
- Motion Magnification
- Gait Analysis
- Tracking and Temporal Segmentation

Learning and Image Representación

- Learning Models
- Image Data Analytics
- Fusion Models

Imaging and Inverse Problems

- Image Formation Models
- Image Reconstruction
- Biomedical Image Processing



Imaging and Inverse Problems

Associate Projects

- Adaptive mimetic methods for image reconstruction
  PhD thesis
- Deep Learning for ophthalmolgical diseases
  Undergrad project

Motion Understanding

- MU1: Motion Magnification
- MU2: Gait Analysis
- MU3: Tracking and Temporal Segmentation

Motion Understanding

Associate Projects

- MU1: ocular parkinson
  Master thesis. Isail Salazar
- MU1: hands resting tremor in parkinson
  project. Sergio Contreras
- MU1 y MU2: magnification eulerian parkinson
  Master project. Brayan Valenzuela

Motion Understanding

Associate Projects

- MU2: Gait markerless
  Luis Carlos Guayacán
- MU2: Gait dataset
  group project. Luis, Brayan, Juan Felipe
- MU2: Sign dataset
  group project. Jefferson, Brayan, Juan Felipe

Motion Understanding

Associate Projects

- MU3: Right Ventricle Segmentation
  Jean Pico
- MU3: Heart disease classification
  Ever Sarmiento
- MU3: Heart disease tracking and characterizacion
  Alejandra Moreno
- MU3: Polyps detection and tracking endoscopy videos
  Lina Ruiz

Learning and Image Representation

- LIR-1: Learning models
- LIR-2: Image Data Analytics
- LIR-3: Fusion Models

Learning and Image Representation

Associate Projects

- LIR-2: Spatio-temporal patterns representation for action recognition
  Master thesis. Gustavo Garzón
- LIR-1, LIR-2: Continuous gesture representation from recursive learning strategies
  Master thesis. Jefferson Rodriguez
- LIR-1, LIR-2: Action representation and recognition from compact covariance descriptors
  Master thesis. Wilson Moreno

Learning and Image Representation

Associate Projects

- LIR-3: 3d-t motion trajectories for gesture recognition
  Fabian Castillo
- LIR-1, LIR-2: Action representation from trajectory covariance descriptors
  project. Oscar Mendoza
- LIR-1: Deep learning for object classification
  Master thesis colab. Miguel Plazas

HDSP: ANÁLISIS DE MOVIMIENTOS SALIENTES EN ESPACIOS COMPRIMIDOS PARA LA CARACTERIZACION EFICIENTE DE VIDEOS MULTIESPECTRALES

- Pendiente por ejecutar: $ 9.970.700
- Compromisos cumplidos
- Compromisos pendientes

MACV: SEMILLERO

- Pendiente por ejecutar: $
- Compromisos cumplidos
- Compromisos pendientes: INSCRIBIRSE A RED DE SEMILLEROS

BIVLab

Proyectos enviados

Local conferences

- 1XCCC. Congreso colombiano de computación- deadline: XX/XX/XX- date conf: - Springer
- SIPAIM
- WEA

International conferences

- ICPR
- CVPR
- ICIP
- MICCAI
- ISBI
- SPIE medical imaging
- SPIE vision

Local Journal

- Revista Facultad de Ingeniería. UdeA. Index B.
- Revista UIS Ingenierías. Index C.
- DYNA. Index A2.

International Journals

- PAMI: Transactions on Pattern Analysis and Machine Intelligence - IEEE - IF: - Index col:
- International Journal of Computer Vision - Springer
- Pattern Recognition - Elsevier
- Medical Image Analysis - Elsevier
- Transactions on Medical Imaging - IEEE