Manuel Lagunas

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EDUCATION

ZARAGOZA UNIVERSITY
MSc in Applied Mathematics
Sep 2017 | Zaragoza, Spain
Master thesis: 9.5/10

ZARAGOZA UNIVERSITY
BS in Computer Science
Dec 2016 | Zaragoza, Spain
Bachelor project: 9.3/10

AARHUS UNIVERSITY
Jun 2015 | Aarhus, Denmark
One year exchange programme.

LINKS

Github:// **mlagunas**
Stackoverflow:// **manuel-lagunas**
LinkedIn:// **mlagunas**
Twitter:// **@mlagunas_**

SKILLS

PROGRAMMING
Advanced:
Python • Git • LaTeX • SVN
Intermediate:
C • C++ • CSS • HTML
Javascript • PHP
Familiar:
Android • MySQL • C# • Java

LANGUAGES
Spanish • Native speaker
English • Fluent
French • Basic

COURSEWORK

GRADUATE
Stochastic Processes
Machine Learning
Optimization Techniques
Evolutionary Computation

UNDERGRADUATE
Artificial Intelligence
Computer Graphics
Compilers
Unix Tools and Scripting

AWARDS

2016, NASA SpaceApps
  • Best citizen-science project

2015, Open Source Software Contest
  • Finalist

RESEARCH EXPERIENCE

ADOBE GRAPHICS INTELLIGENCE LAB | Research Intern
Jun 2019 – Current | San Jose, CA
Working with **Xin Sun** and **Nathan Carr** on human capture and relighting.

GRAPHICS AND IMAGING LAB | Zaragoza University, PhD in Machine Learning and Computer Graphics
Oct 2017 – Current (Sep 2021) | Zaragoza, Spain
Working on the interface between machine learning and computer graphics. With a particular interest in the integration of machine learning into inverse rendering methods and in the intersection between human vision perception and machine learning. I am being supervised by **Diego Gutierrez** and **Belen Masia**.

GRAPHICS AND IMAGING LAB | Undergraduate Researcher
Oct 2016 – Sept 2017 | Zaragoza, Spain
Worked with **Elena Garces** on transfer learning and similarity problems in non-photorealistic domains (like cliparts or icons) while I was studying my bachelor´s and master´s degrees. This resulted in two publications: *Learning Icons Appearance Similarity* and *Transfer Learning for Illustration Classification.*

PUBLICATIONS

[1] Manuel Lagunas, Sandra Malpica, Ana Serrano, Elena Garces, Diego Gutierrez, and Belen Masia. **A Similarity Measure for Material Appearance**. In: *ACM Transactions on Graphics (SIGGRAPH 2019)* 38.4 (2019).

[2] Manuel Lagunas, Elena Garces, and Diego Gutierrez. **Learning Icons Appearance Similarity**. In: *Multimedia Tools and Applications* (2018).

[3] Manuel Lagunas and Elena Garces. **Transfer Learning for Illustration Classification**. In: *Spanish Computer Graphics Conference (CEIG)*. Eurographics Association, 2017.

RESEARCH ACTIVITIES

Deep Bayes Summer School | Aug 2019, Moscow, Russia
Summer school on deep learning and bayesian methods.

DS3 Data Science Summer School | Jun 2019, Paris, France
Summer school covering the latest advances in the field of data science.

WORK EXPERIENCE

IBERCENTRO MEDIA | Software Engineering Intern
Jun 2015 – Oct 2015 | Zaragoza, Spain
Software consulting company specialized in services for mass media companies. I created a tool for automatic fact extraction from spanish text leveraging natural language processing (NLP) tools.

INDIVIDUAL PROJECTS

Evolutionary Algorithms Library | Python + Numpy + Matplotlib
High-level library that uses evolutionary strategies to solve numerical optimization problems with a modular structure that allows to easily implement new operators.

PyTorch np-transforms | Python + PyTorch + Numpy
PyTorch image transforms based on Numpy instead of the default Python Imaging Library. It includes support for HDR images, adds new transforms and filters.