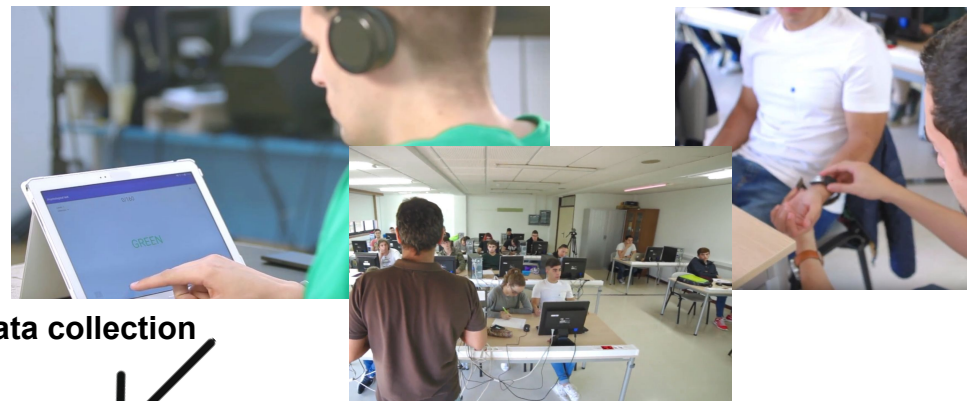


Wearables



Research in laboratory and educational settings



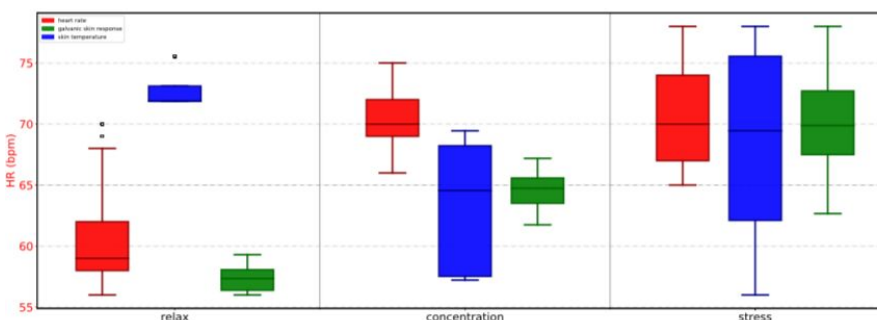
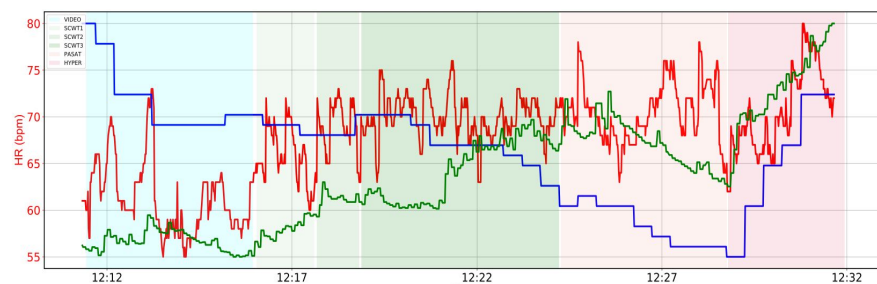
Data collection

Physiological signals



Stress/Sleep detection

Analysis



userID	SVM	LWL	C4.5	IBK	Naive Bayes
001	94.3%	87.0%	100%	98.0%	92.3%
002	99.7%	99.5%	99.0%	98.0%	96.8%
.
.
Mean	97.9%	91.1%	99.3%	98.6%	94.9%
std	2.10	7.74	0.78	0.51	3.03

NOVEL ARCHITECTURE FOR MULTIMEDIA HARDWARE ACCELERATION

Universidade de Vigo

AUTHOR: GHOFRANE EL HAJ AHMED

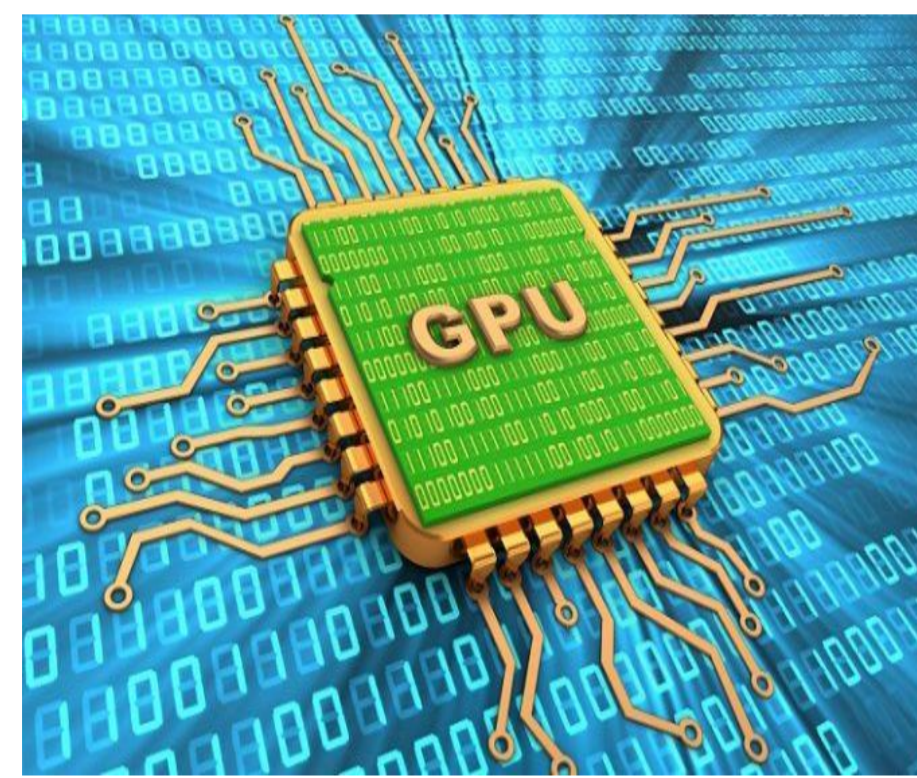
**THESIS ADVISOR: FELIPE GIL CASTIÑEIRA
ENRIQUE COSTA MONTENEGRO**



PhD Programme on Information and Communications Technology (Doc_TIC)

The technology related to the cloud computing, the GPUs and the container ecosystem has been evolving in the last years.

Design a new architecture of GPU manager and scheduler in cloud computing.



Scheduler

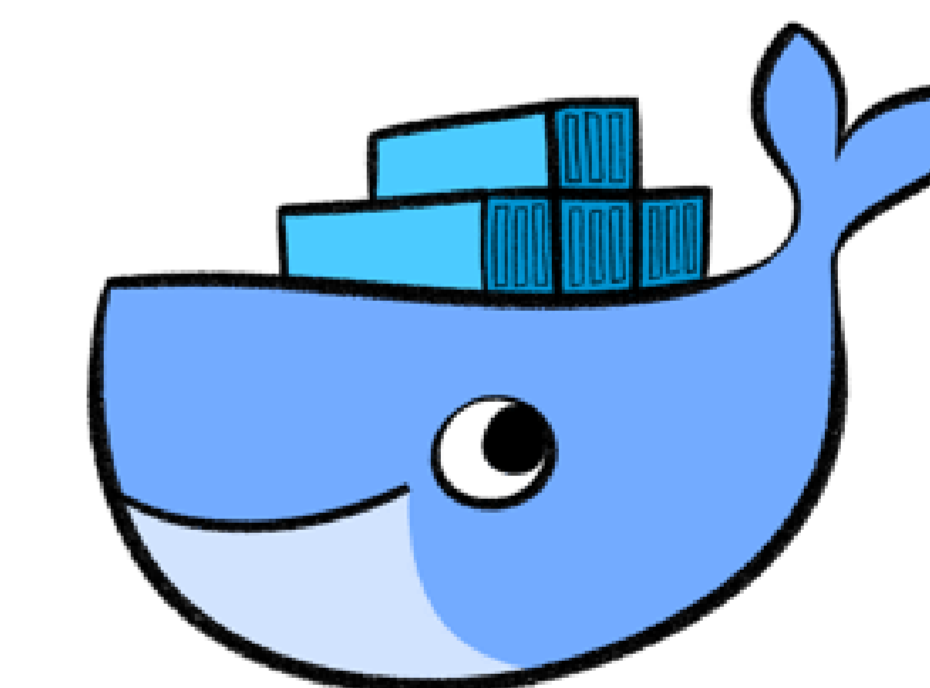


Test the GPU on the Embedded Board



kubernetes

Modeling the GPU task on Docker and Kubernetes platform.

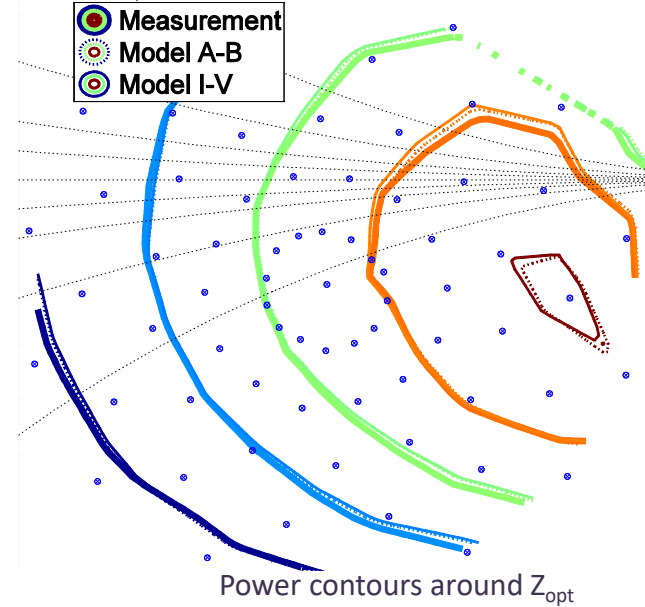
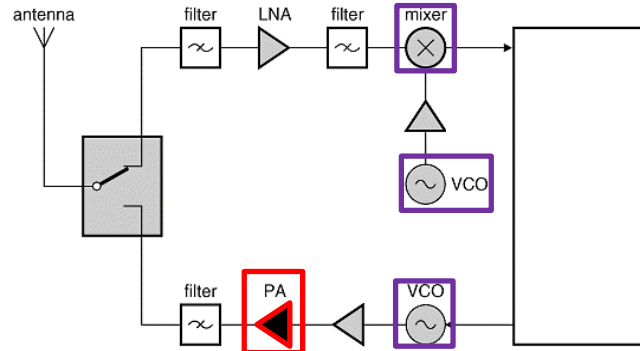


Behavioural Modelling of Microwave Transistors for Wideband High Efficiency Power Amplifier Design

➤ **Motivation:** Efficient Broadband PAs

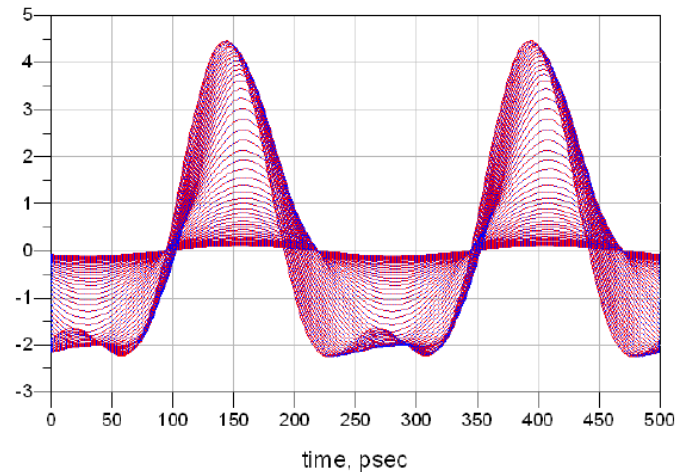
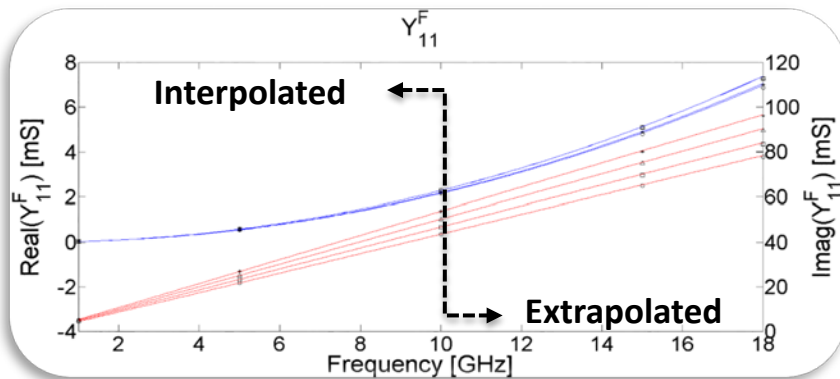


UAV



➤ **Objectives:**

- **Bandwith** improvement of NL behavioural models
- Application design of effic. broadband **PA**

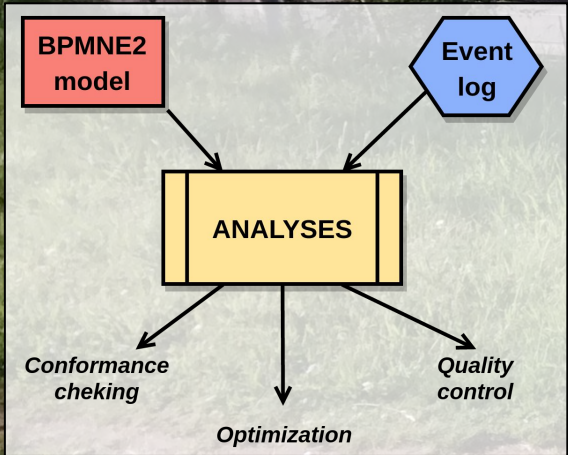


Contribution to development of telematic services for data analysis in technology area. Application to eHealth field.

Author: Mateo Ramos Merino **Thesis Advisors:** Juan M. Santos Gago, Luis M. Álvarez Sabucedo
Department of Telematic Engineering , University of Vigo

In some domains, such as eHealth, process monitoring is very important. It is mandatory to control, check and verify the implementation of workflows as designed in actual scenarios.

OBJECTIVES	Improve expressiveness of current modeling languages.
	Enhance results of conformance checking techniques using semantic information.



Real behavior
Collect traces on this for analyses

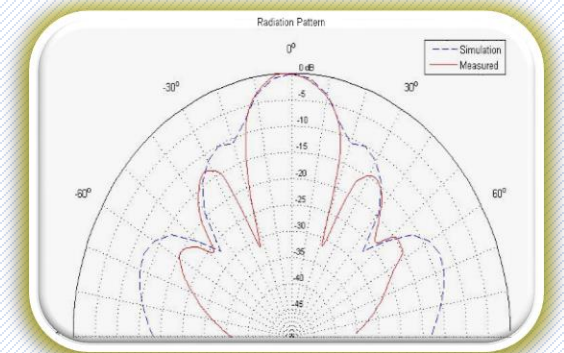
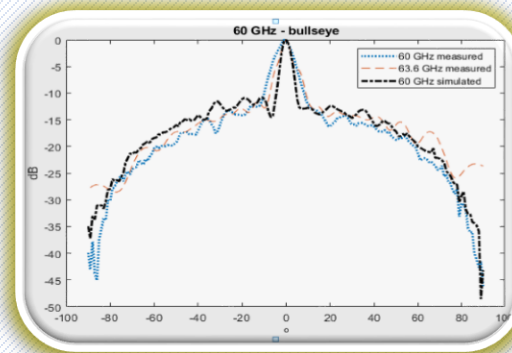
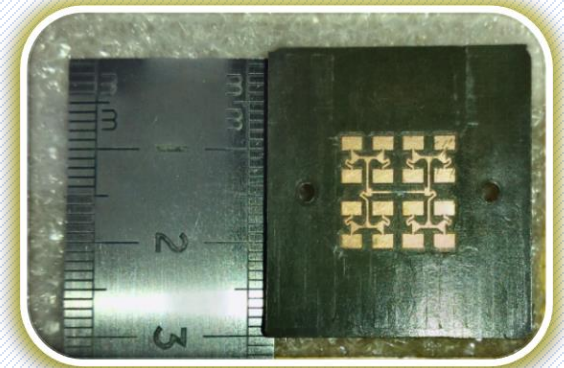
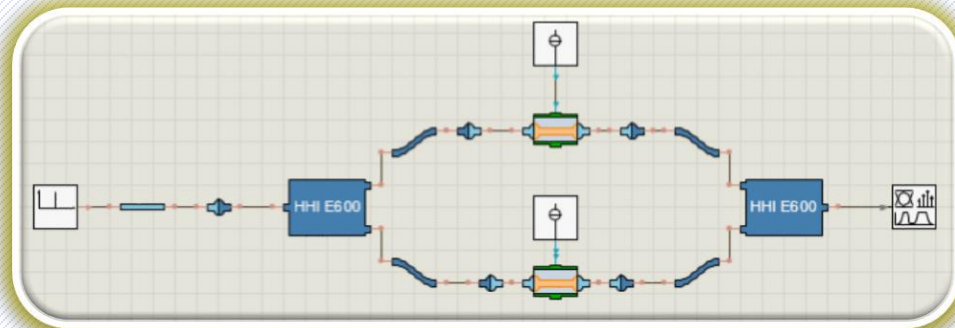
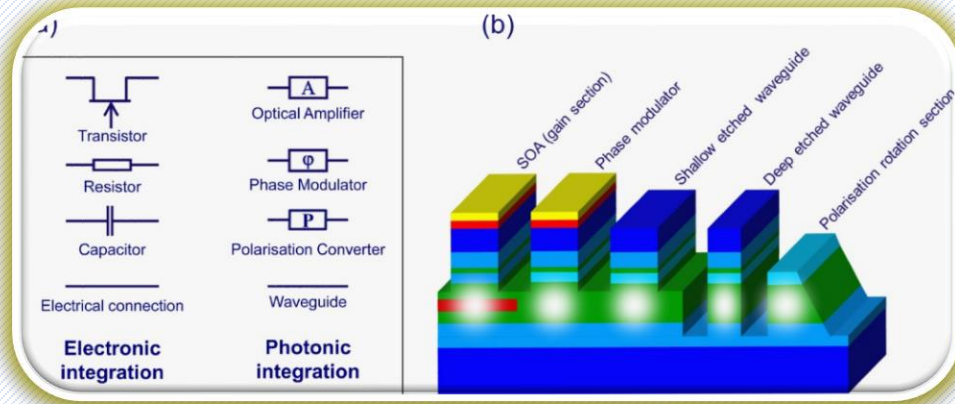
Desired behavior
Workflow
Process model



DESIGN OF SYSTEMS FOR BREAKTHROUGH RADIO SYSTEMS

by David Álvarez Outerelo , Ana Vázquez Alejos and Francisco Díaz Otero

2018 WORKSHOP PhD STUDENT PROGRESS



PRESENTATION ATTACK DETECTION ON FACE RECOGNITION SYSTEMS IN MOBILE DEVICES

Artur Costa-Pazo, Esteban Vazquez-Fernandez and José Luis Alba-Castro



Topic

Face Recognition
Presentation Attack Detection
Mobile devices

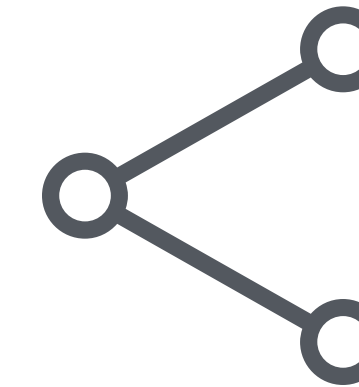


Achieved goals

1st-ranked face-PAD algorithm on **IJCB** Conference, Denver 2017.

We have written a chapter for the Handbook of Biometric Anti-Spoofing. **Challenges of Face Presentation Attack Detection in Real Scenarios**

Speaker at the **Machine Learning Workshop Galicia**, Santiago de Compostela.



Reproducibility

A python package will be available on github.

Scores and source code will be available too.



ADVANCES IN ROBUST TECHNIQUES FOR THE IDENTIFICATION OF PEOPLE IN AUDIOVISUAL CONTENTS

Author: Eduardo Ramos Muguerza Advisors: José Luis Alba Castro, Laura Docío Fernández

BIOMETRIC SIGNATURE



FACE DETECTION



Characterization of people:
Study of efficient
classical and deep
learning algorithmic
techniques

POSE ESTIMATION

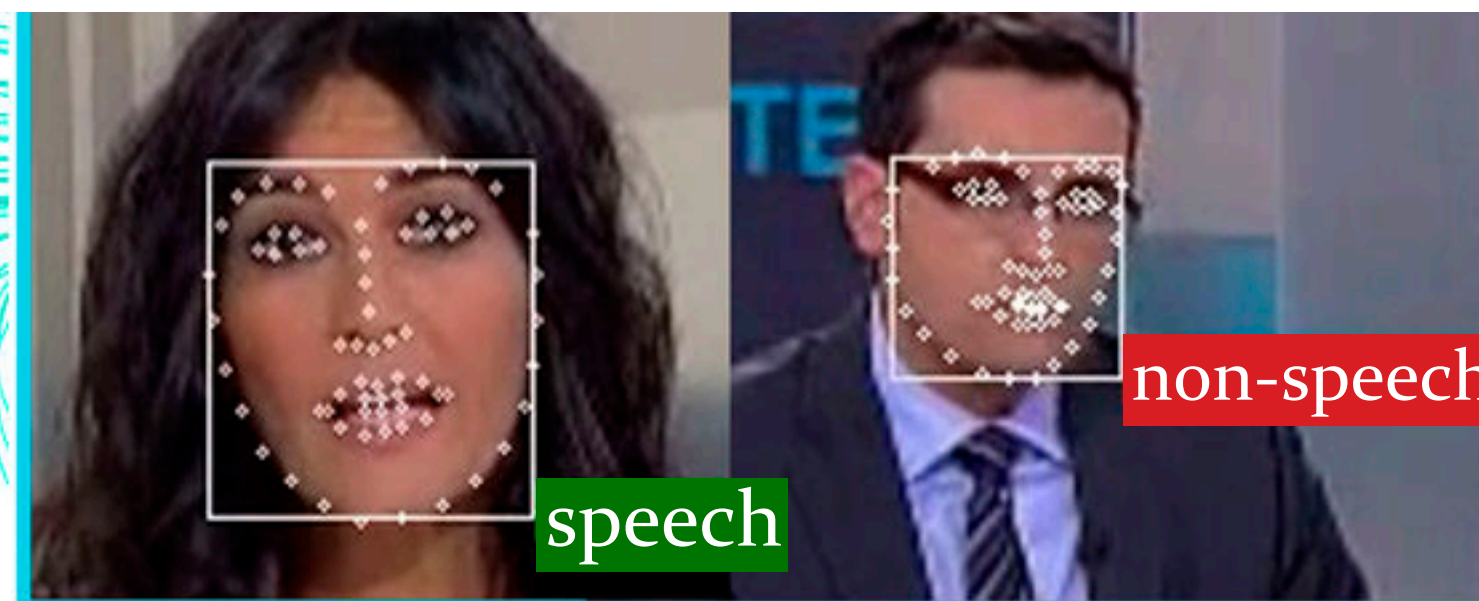


Identification of
transmitters and
receivers



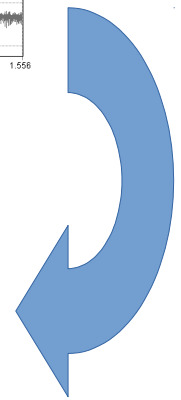
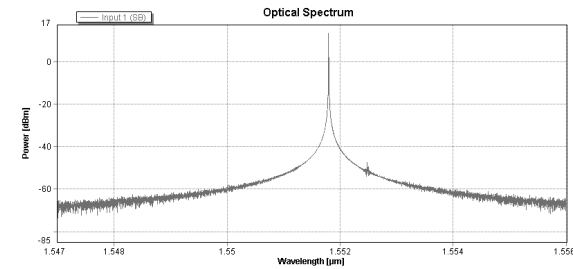
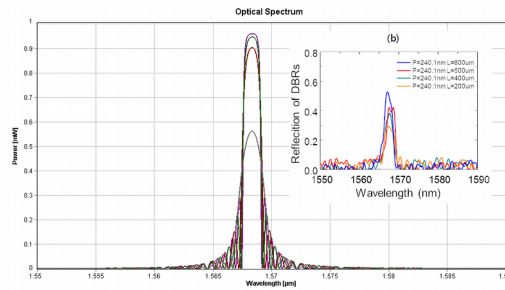
Detection of
people interacting

SPEECH DETECTION. SPEAKER DIARIZATION



On-chip directly phase-modulated laser source for QKD applications

by Pablo Vilar Gómez and Francisco Díaz Otero
2018 WORKSHOP PhD STUDENT PROGRESS



QKD

