PFC a Empreses (Tardor 2014-15)

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Empreses on pots fer el PFC

Empreses i Institucions que ofereixen projectes a l'ETSETB i que gestiona l'escola
Última actualització: 03 de desembre de 2013

Quan demaneu una plaça mitjançant l'Intranet, ho haureu de fer en referència al codi que surt a la taula.

Philips Research Europe

CERN

EADS Astrium

TriaGnoSys GmbH

Nokia Siemens

Continental, A.D.C. GmbH

DLR – German Aerospace Centre, Institute of Communications and Navigation

Alcatel-Lucent

Bell Laboratories

Idiap Research Institute

Intel Mobile Communications

Philips Research Europe

Philips Research Europe – Eindhoven. The Netherlands. Professor de contacte: Eduard Alarcón

Codi	NL PhilipsEin_1
Estudis	Pla 92 i Graus
Data d'entrada	05.11.13
Tipus d'estada	PFC i TFG
Descripció	**Optical scattering in phosphor-converted LEDs** Description The Philips Research Solid State Lighting group is searching for graduate and undergraduate students willing to contribute to the solid state lighting revolution. The student/s will work in a high tech industry facility together with a professional research team of electrical engineers and physicists. The proposed area of investigation deals with numerical methods and computational techniques to model the processes of photo-conversion and light extraction in power LED (Light-Emitting Diodes) devices. We aim at predicting the performance of phosphors by describing the underlying physics responsible for the conversion of pump blue light into white light in most of our current LUXEON LED products (visit Lumileds website). A 3D optics model of a thin film LED micro-structure in combination with the phosphor particle models ought to be studied and predictions compared to experiments. The student will have the opportunity to closely work with a research team investigating a number of exciting fundamental physics mechanisms that will likely make LEDs the single most important light source technology in the near future. Context Solid state lighting technologies are among the most prominent innovations influencing the way in which we improve our future by reducing energy consumption. So much so that the current 20% of the world's electricity consumed by lighting can potentially be reduced to 4% with the full-scale adoption of LEDs.
Inici	July 2014 (or earlier)
Durada	6 months; extension possible.
Nombre de places	1
Requisits	Good programming skills, Good mathematics skills, particularly, numerical methods for solving PDEs (frequency and time domain), Good knowledge of Maxwell's equations, LED device physics knowledge, High motivation and good English (written and spoken)
Compensacions	A compensation and housing allowance will be given.

Codi	NL PhilipsEin_2
Estudis	Pla 92 i Graus
Data d'entrada	11.11.13
Tipus d'estada	PFC/TFG
Descripció	**Advanced LED Drivers** Description The Philips Research Solid State Lighting group is searching for graduate and undergraduate students willing to contribute to the exciting solid state lighting revolution. The student/s will work in a high tech industry facility together with a professional research team of electrical engineers. The student/s will closely work with the research team to fundamentally analyze a number of novel converter topologies suitable for LED drivers.

	Context
	Solid state lighting technologies are among the most prominent innovations influencing the way in which we improve our future by reducing energy consumption. So much so that the current 20% of the world's electricity consumed by lighting can potentially be reduced to 4% with the full-scale adoption of LEDs (Light-Emitting Diodes). LED electronics need to keep pace with the continuously increasing efficiency and miniaturization of LED engines.
Inici	July 2014 (or earlier)
Durada	July 1 – December 31, 2014 (or earlier); extension possible
Nombre de places	1
Requisits	Good knowledge in power electronics, Good knowledge in circuit theory and circuit simulation tools, Practical skills to set up and measure circuits, High motivation, teamwork, good English (written and spoken)
Compensacions	A compensation and housing allowance will be given.

CERN

CERN. Ginebra, Suïssa

CERN, European Organization for Nuclear Research

Tipos de programas: **PFC i/o practicas**
Solicitud de plazas: Para todos los programas, la solicitud deberá hacerse a través de la web del **CERN** (http://www.cern.ch/) y los candidatos serán seleccionados por el CERN. Si es el caso, la Escuela podrá reconocer las práctica o proyecto como programa de movilidad.

Programas que la Escuela podría reconocer:

1. Summer Student Programme:
       a. Programa enfocado a realizar prácticas y proporcionar experiencia profesional.
       b. De 8 a 13 semanas
2.   Technical Student Programme:
       a. Programa enfocado a estudiantes que deseen realizar su proyecto final de carrera.
       b. 12 meses
       c. Existen 3 convocatorias al año con comités de selección para cada una de ellas
       d. La próxima convocatoria finaliza el próximo 5 de Marzo.
3.   Open Lab Student Programme:
       a. Programa enfocado a realizar prácticas y proporcionar experiencia profesional.
       b. 9 semanas en verano.

EADS Astrium

EADS Astrium. Toulouse, França.

Astrium és una empresa francesa que ofereix una projectes enfocats a l'enginyeria aeronàutica. Consulta els projectes que et poden oferir en el següent link.

TriaGnoSys GmbH

TriaGnoSys GmbH, Wessling-Oberpfaffenhofen. Germany

Codi	D TrGnSys-Wess1
Estudis	Pla 92
Data d'entrada	07/11/13
Tipus d'estada	PFC
Descripció	**Implementation of a Demonstrator** Background In recent years continuous efforts by the Aviation community to improve upon the safety record within the Air Transport industry have been successful. Today, the outstanding safety level of air transport is in part due to the standard practice of having a two-pilot flight crew. Pilots have in many circumstances prevented accidents, notably mid-air collisions. Certain combinations of unpredictable situations, such as difficult meteorological conditions, multiple system failures or cockpit crew incapacitation, can lead to peak workload conditions. The amount of information and actions to process may, in these specific and difficult to predict cases, exceed the reasonably acceptable workload of the crew. As accidents are more likely to occur when workload in the cockpit is high, improving crew performance in peak workload conditions is thus critical to enhance safety. The ACROSS project will develop new cockpit applications and human-machine interfaces covering all safety related crew duties with the overall goal of reducing crew workload and improving the safety level in two-pilot operations. TriaGnoSys participates in multiple work packages of the ACROSS project, being leader of the communications work package, where new data link technologies will be developed for provision of future safety-critical air-ground communication, such as for SESAR's datacentric ATS/AOC communication, as well as for remote monitoring&control of the aircraft by a ground-based backup pilot. As part of the work of this package, a demonstrator will be built to validate the results obtained. This demonstrator will require implementation of

aircraft/cockpit and ground end-system demonstrator platforms to (a) generate realistic data
to be sent over the air-ground data links and (b) to allow validation and demonstration of the
ACROSS achievements.

Objectives
The goal of this thesis is to implement at least one part of said demonstrator. A list of already envisioned features of the
demonstrator follows:

- End user aircraft (e.g. CPDLC HMI) and ground (e.g. monitoring&control HMI forbackup pilot) system mock ups
to display applications over the ACROSS communication platform.

- X-Plane Flight simulator communication (e.g. as aircraft simulator to generate realisticFDR/monitoring data to
be sent to ground station and as ground station simulator to display monitoring data in a virtual cockpit).

- Future Radio Management Panel for control and monitoring of the aeronautical link status.

- TriaGnoSys will provide the interface to the Human Factors experts participating in ACROSS to make sure that
the demonstrator platforms to be developed will comply as far as possible with the standards from cockpit
avionics, e.g. regarding HMI design.

Methodology
1. Familiarization with the thesis framework.
2. Understand the demonstrator architecture.
3. Define the requirements of the implementation to be performed.
4. Implement the selected feature of the demonstrator.
5. Verify the implementation.
6. Write a thesis report.

Inici	Beginning from early 2014 or late 2014
Durada	The thesis shall be 6 months in duration.
Nombre de places	1
Requisits	C and/or C++ knowledge. GUI implementation. Medium to advanced English language proficiency is required.
Compensacions	A compensation will be given.

Codi	D TrGnSys-Wess2
Estudis	Pla 92
Data d'entrada	07/11/13
Tipus d'estada	PFC
Descripció	**Implementation of a link emulator for Linux** Background In recent years continuous efforts by the Aviation community to improve upon the safety record within the Air Transport industry have been successful. Today, the outstanding safety level of air transport is in part due to the standard practice of having a two-pilot flight crew. Pilots have in many circumstances prevented accidents, notably mid-air collisions. Certain combinations of unpredictable situations, such as difficult meteorological conditions, multiple system failures or cockpit crew incapacitation, can lead to peak workload conditions. The amount of information and actions to process may, in these specific and difficult to predict cases, exceed the reasonably acceptable workload of the crew. As accidents are more likely to occur when workload in the cockpit is high, improving crew performance in peak workload conditions is thus critical to enhance safety. The ACROSS project will develop new cockpit applications and human-machine interfaces covering all safety related crew duties with the overall goal of reducing crew workload and improving the safety level in two-pilot operations. TriaGnoSys participates in multiple work packages of the ACROSS project, being leader of the communications work package, where new data link technologies will be developed for provision of future safety-critical air-ground communication, such as for SESAR's datacentric ATS/AOC communication, as well as for remote monitoring&control of the aircraft by a ground-based backup pilot. As part of the work of this package, a demonstrator will be built to validate the results obtained. This demonstrator will require a suitable tool to emulate the air-to-ground link conditions for multiple IP link technologies (both satellite and direct air-toground such as LDACS). Objectives 1. Writing a clear documentation. 2. Implementing a link emulator capable of: - Simulate delay on the packets based on a given probability density function. - Simulate a maximum bandwidth. - Enable QoS prioritization (i.e. high priority packets are sent before previously received low priority packets). - Simulate packet losses and bit errors. Note: if you are familiar with Linux and the netem tool: netem has several downsides for our application and is not directly applicable for the link emulator we need and a new tool needs to be developed!

	Methodology 1. Understand the objectives of the thesis. 2. Write the software requirements for the implementation. 3. Implement the link emulator. 4. Write a thesis report.
Inici	Beginning from early 2014 or late 2014
Durada	The thesis shall be 6 months in duration.
Nombre de places	1
Requisits	C and/or C++ knowledge. Knowledge about probability concepts. Networking knowledge is preferred. Knowledge of the Linux code is welcomed. Medium to advanced English language proficiency is required.
Compensacions	A compensation will be given.

Codi	D TrGnSys-Wess3
Estudis	Màsters
Data d'entrada	07/11/13
Tipus d'estada	Pla 92
Descripció	**Design & implementation of a communications control server for a rapid deployment unit for emergency communications** Summary TriaGnoSys currently participates in the European research project ABSOLUTE (Aerial Base Stations with Opportunistic Links for Unexpected and Temporary Events). This project will introduce a rapidly deployable UMTS and LTE network based on Low Altitude Platforms (LAPs) and Portable Land Units (PLUs) for the support of disaster-relief activities. In the ABSOLUTE network, voice and data traffic from victims and/or first responders is routed through the PLU and backhauled over S-band satellite links to the public networks, the Internet or to a remote emergency coordination centre. In this context, the PLU aggregates multiple interoperable communication systems steered by the PLU users. The current thesis tackles the software that controls the multiple PLU communication systems (i.e. UMTS, LTE, WLAN and TETRA among others) and develops a GUI to configure and control them. Objectives 1. To design the software that controls the multiple subsystems in the PLU. 2. To draft the UML design of the defined software 3. To implement the software solution 4. To document the development 5. To test the server. Methodology 1. Understanding of the basics of TriaGnoSys emergency communications suite. 2. Design of the control server that interfaces with the different communications subsystems. 3. Definition and UML design of the target software. 4. Implementation 5. Testing. 6. Documentation writing
Inici	The thesis shall start between January and September 2014.
Durada	The thesis shall be 6 months in duration.
Nombre de places	1
Requisits	Required skills: Software development with C++ and Java, Knowledge of mobile communication systems such as UMTS, LTE and/or TETRA, Knowledge in software modelling with UML, Knowledge in HTTP and APIs, Experience working on Linux environment Desired skills: Knowledge of wireless sensor networks, Knowledge of satellite communications, Knowledge/experience in intuitive GUI design with HMTL5, CSS3 and Javascript, Knowledge of web servers (e.g. Apache, ...)
Compensacions	A compensation will be given.

Nokia Siemens

Nokia Siemens, Aalborg, Denmark

Codi	DK NSN Aal_1
Estudis	Pla 92 i Màsters
Data d'entrada	11/11/13
Tipus d'estada	PFC i TFM
Descripció	**Medium Access Control and management improvements for High Efficiency Wireless LAN** The IEEE 802.11 standardization committee has launched in 2013 a study group focused on improving the efficiency of the MAC and management of the next generation WLAN standard. New issues, problems, and topics are daily rising from such investigations, and new horizons for the research frontier appear. In this project the focus will be in first evaluating the system level performance of a set of IEEE 802.11ac MAC features in a proprietary simulator, and then pushing forward the research by improving their efficiency keeping the industrial focus aligned with the IEEE 802.11 HEW project.

Inici	End of August 2014
Durada	8 months
Nombre de places	2
Requisits	C++, MatLab programming skills required. English proficiency test (IELTS or TOEFL) is required.
Compensations	A compensation will be given.

Codi	DK NSN Aal_2
Estudis	Pla 92 i Màsters
Data d'entrada	18/11/13
Tipus d'estada	PFC i TFM
Descripció	**5G techniques proof-of-concept testbed** A novel 5G radio access technology is currently being designed to circumvent the limitations of the existing radio standards in coping with the exponential increase of the data traffic in the next years. 5G technology will be focused in local area where a dense uncoordinated deployment of small cells with limited coverage is foreseen, and will feature a number of advanced techniques such as distributed synchronization, interference coordination and suppression. This project will focus on the design and implementation of some of the most promising 5G techniques over a testbed network based on USRP radio hardware. The aim is to address their effective potential in boosting the network throughput in a real world scenario.
Inici	End of August 2014
Durada	8 months
Nombre de places	2
Requisits	C++, MatLab programming skills required. English proficiency test (IELTS or TOEFL) is required.
Compensations	A compensation will be given.

Continental, A.D.C. GmbH

Continental, A.D.C. GmbH. Lindau, Germany

A partir d'ara podeu trobar totes les vacants per a practicants i projectes fi de carrera dins de l'empresa Continental AG a la pagina web:

https://www.portal.careers-continental.com/portal/sites/JobSearch.jspx?locale=en_GB&type=I

Podeu triar regió, pais, i fins i tot ciutat on treballar per tot el mon. Si esteu especialment interessats en la temàtica de processament de la imatge, radar o infraroig i us interessa treballar dins de la indústria automobilística, heu de triar Alemanya i Lindau/Ulm/Munich com a país i ciutats per cercar vacants.

DLR – German Aerospace Centre, Institute of Communications and Navigation

DLR – German Aerospace Centre, Institute of Communications and Navigation, Oberpfaffenhofen-Wessling, Germany.

Codi	D DLR Wess-1
Estudis	Pla 92 i Màsters
Data d'entrada	20/11/13
Tipus d'estada	PFC i TFM
Descripció	**Design and Implementation of a Software Defined Radio Random Access wireless Receiver** The number of devices capable to interconnect is steadily increasing, posing new and interesting research questions. A remarkable example is the quest for an efficient way to manage the access of a large number of terminals to a shared wireless medium. One possible approach in this direction is the Random Access (RA) paradigm, with its simplest yet widespread ALOHA implementation. Based on this approach, more refined schemes have been proposed in the recent past, improving performance while adding complexity both at the receiver and at the transmitter side. As to the latter, multi-packet transmissions, pseudo random seed generation and advanced coding schemes are only some of the new features that are currently under investigation and deployment. Within this context, DLR is investigating a satellite-based maritime communications scenario, where a large number of ships travelling on the seas or oceans need to exchange data among each other or with a station on the ground. Data are sent from the see to the satellite using RA, and a high efficiency of the communication system has to be achieved. Tasks One of the key steps towards the implementation of maritime satellite systems is the development and implementation of a RA receiver. The candidate shall develop and implement a receiver able to cope with various RA schemes and to properly deliver incoming packets to a gateway, possibly coordinating with other peers. The receiver will be implemented in software defined radio (SDR) and will include functionalities like demodulation, de-interleaving, decoding, etc. The candidate will be responsible, among the rest, of the following tasks: • definition of the receiver requirements and features in order to cope with different random access schemes • receiver design with flexible RA protocol capabilities

	• implementation of the defined features in the SDR receiver • verification of the implemented functionalities by receiving data coming from RA transmitters (already available)
Inici	Summer 2014
Durada	6 - 8 months
Nombre de places	1
Requisits	Studies in electrical, communications engineering or computer science, Good knowledge of layer 2 (medium access) protocols, Basic knowledge of channel-coding, Good programming skills (C/C++ and Matlab), Working level English.
Compensacions	

Codi	D DLR Wess-2
Estudis	Pla 92 i Màsters
Data d'entrada	20/11/13
Tipus d'estada	PFC i TFM
Descripció	**Design and Implementation of a flexible Random Access wireless Transmitter** The number of devices capable to interconnect is steadily increasing, posing new and interesting research questions. A remarkable example is the quest for an efficient way to manage the access of a large number of terminals to a shared wireless medium. One possible approach in this direction is the Random Access (RA) paradigm, with its simplest yet widespread ALOHA implementation. Based on this approach, more refined schemes have been proposed in the recent past, improving performance while adding complexity both at the receiver and at the transmitter side. As to the latter, multi-packet transmissions, pseudo random seed generation and advanced coding schemes are only some of the new features that are currently under investigation and deployment. Within this context, DLR is investigating a satellite-based maritime communications scenarios, where a large number of ships travelling on the seas or oceans need to exchange data among each other or with a station on the ground. Data are sent from the see to the satellite using RA, and a high efficiency of the communication system has to be achieved. Tasks As a first step towards the definition of a maritime satellite system, the development and implementation of a portable wireless transmitter will be carried out. Such a device will be of use as a proof of concept for some key ideas and algorithms for advanced RA techniques later to be refined. To this aim, the candidate shall develop a portable transmitter with wireless capabilities, composed by a Linux based micro-PC and a radio frontend working in the WiFi frequency bands, and able to support different RA schemes. The candidate will be responsible of the following activities: • setup of the basic transmitter system, with proper connection and interfacing of a micro-PC and a radio frontend • definition of a transmitter software architecture capable of effectively coping with different random access schemes • software design of the transmitter • implementation of the defined features in the portable wireless transmitter • definition and realization of a test campaign
Inici	Summer 2014
Durada	6 - 8 months
Nombre de places	1
Requisits	Studies in electrical or communications engineering or computer science, Basic knowledge of layer 2 (medium access) protocols, Good knowledge about Linux operative systems, Good programming skills (C/C++), and knowledge about embedded programming, Working level in English
Compensacions	

Alcatel-Lucent

Alcatel-Lucent. Nozay, France.Professor responsable: José Antonio Lázaro

Codi	FR Alcatel_1
Estudis	Pla 92
Data d'entrada	25.11.13
Tipus d'estada	PFC
Descripció	**WDM Optical Fiber Networks** Company: Alcatel-Lucent FRANCE (www.alcatel-lucent.com) Alcatel-Lucent has helped weave the technological fabric of modern society. Since its founding technology from Alcatel-Lucent has shaped the ways people live, work and play. Over the past years, Alcatel-Lucent R&D community has made seminal scientific discoveries, created powerful new technologies, and built the world's most advanced and reliable networks. Project: Fiber-optic communications are evolving from simple intensity modulation with direct detection systems towards sophisticated multilevel modulation with coherent detection. Furthermore, digital signal processing techniques are also under development to overcome the main limitations given by transmission impairments. The project will focus on research and development of specific topics related with WDM Optical Fiber Networks. Location: Alcatel-Lucent France Centre de Villarceaux Route de Villejust

	91620 Nozay
Inici	September 2014 to February 2015
Durada	6-9 months
Nombre de places	1
Requisits	Fiber-optic communications, digital communications, signal processing, laboratory skills, Matlab simulation, excellent academic records, good English knowledge.
Compensations	A compensation will be given.

Bell Laboratories

Bell Laboratories (Alcatel•Lucent). NJ, USA. Professor de contacte: Joan M. Gené Bernaus

Codi	USA Alcatel_1
Estudis	Pla 92 i graus
Data d'entrada	03.12.13
Tipus d'estada	PFC
Descripció	**High Capacity Fiber-Optic Transmission Systems** Introduction and Short description: Bell Labs (www.bell-labs.com) has helped weave the technological fabric of modern society. Since its founding in 1925, technology from Bell Labs has shaped the ways people live, work and play. Over the past 80 years, the Bell Labs R&D community has made seminal scientific discoveries, created powerful new technologies, and built the world's most advanced and reliable networks. Here are some Bell Labs innovations that changed the world: The Transistor (1947), Shannon's Information Theory (1948), Laser (1958), Communications Satellites (1962), The CCD (1969), Unix Operating System and C Language (1969-1972), Digital Signal Processor (DSP) (1979), Optical WDM systems and networks (1990), First 100G Ethernet transmission (2005). Project: Fiber-optic communications are evolving from simple intensity modulation with direct detection systems towards sophisticated multilevel modulation with coherent detection. Furthermore, digital signal processing techniques are also under development to overcome the main limitations given by transmission impairments. The scope of the project is to investigate on advanced modulation and detection schemes to exploit the huge capacity of an optical fiber. Some scientific references on the topic are: • Peter J. Winzer, "Beyond 100G Ethernet", IEEE Communications Magazine, vol. 48, no. 7, pp. 26-30, July 2010. • René-Jean Essiambre, Gerhard Kramer, Peter J. Winzer, Gerard J. Foschini, Bernhard Goebel, "Capacity Limits of Optical Fiber Networks", IEEE-OSA Journal of Lightwave Technology, vol. 28, no. 4, pp. 662-701, February 2010. Location: 791 Holmdel-Keyport Rd., Holmdel, NJ 07733, USA maps.google.com ☐ 40.390736,-74.1866 70 Km from Manhattan (New York City) www.nycgo.com Public Transport www.njtransit.com Newark Int. Airport www.panynj.gov/airports/newark-liberty.html
Inici	February 2015
Durada	6-9 months
Nombre de places	1
Requisits	Excellent academic records, good English knowledge, fiber-optic communications, digital communications, signal processing, laboratory skills, Matlab simulation, VHDL.
Compensations	A compensation will be given.

Idiap Research Institute

Idiap Research Institute - EPFL's Idiap Laboratory

Codi	CH IDIAP LABORATORY_1 Martigny - Switzerland
Estudis	Pla 92/Màster
Data d'entrada	29/04/2014
Tipus d'estada	PFC/MT
Descripció	The positions are open for PFC/MT to do research on: 1.- Social media analysis 2.- Ubiquitous computing for human behavior analysis
Inici Durada	6 months

Nombre de places	2
Requisits	Candidates will have a degree in computer science, information science, or electrical engineering with strong mathematical and programming skills and keen to learn about interdisciplinary research.
Compensations	A compensation will be given.

Intel Mobile Communications

Professor de contacte: Ferran Casadevall

Intel Mobile Communications - Aalborg (Dinamarca)

Codi	DK IntelMob_1
Estudis	Pla 92 i Màster
Data d'entrada	21/05/14
Tipus d'estada	PFC i Master Thesis
Projecte i Descripció	**Virtualization in testing: meeting the challenges of LTE-Advanced** With the steady growth in demand for mobile broadband, technologies like LTE and LTE-Advanced are rapidly becoming essential in providing the desired level of connectivity. Based on innovative communication techniques, these radio access technologies pose, however, new challenges in developing and testing products that incorporate them. With the introduction of LTE-Advanced, Intel® is considering the possibility of migrating part of the testing effort from expensive field experiments to virtual experiments in the laboratory. Within the scope of the internship, the candidate will join a team of engineers and researches developing methods to enable such a migration. In particular, under the supervision of such a team, she/he will • Develop an understanding of LTE/LTE-A • Deal with theoretical as well as practical aspects of testing methodologies • Testing on Intel® products • Implementation of novel testing solutions using matlab and c++
Inici	1st September
Durada	12 months
Nombre de places	1
Requisits	Solid skills are expected in the following fields: • Signal processing for digital communications • Digital communications • C/C++ programming • MATLAB • Good written and oral English skills • Good relation and communication skill
Compensations	A compensation will be given.

Codi	DK IntelMob_2
Estudis	Pla 92 i Màster
Data d'entrada	21/05/14
Tipus d'estada	PFC i Master Thesis
Projecte i Descripció	**Advanced testing method for LTE / LTE-A: theory and practice.** As mobile communications evolve, new technologies such as LTE / LTE-A aim at providing connectivity in a wider range of situations. Testing becomes thus an always more challenging task. The intern will be integrated in a team of young researchers and engineers. His task will consist in participating in the development of new testing methods for products. In the frame of the internship, the student will, among others: • Develop an understanding of LTE/LTE-A • Deal with theoretical as well as practical aspects of testing methodologies • Testing on Intel® products • Implementation of novel testing solutions using matlab and c++
Inici	September
Durada	12 months
Nombre de places	1

Requisits	Solid skills are expected in the following fields: • Signal processing for digital communications • Digital communications • C/C++ programming • MATLAB • Good written and oral English skills • Good relation and communication skill
Compensations	A compensation will be given.