



UNIVERSITY OF
THESSALY

<http://www.eece.uth.gr>

Open Days 2021

Department of Electrical and Computer Engineering (EECE),
University of Thessaly

Christos P. Sotiriou,
email: chsotiriou@eece.uth.gr, skype: [christos_sotiriou](https://www.skype.com/people/christos_sotiriou)

The Department of Electrical and Computer Engineering

► Website <https://www.e-ce.uth.gr/>



Τμήμα Ηλεκτρολόγων Μηχανικών & Μηχανικών Υπολογιστών

Πανεπιστήμιο Θεσσαλίας



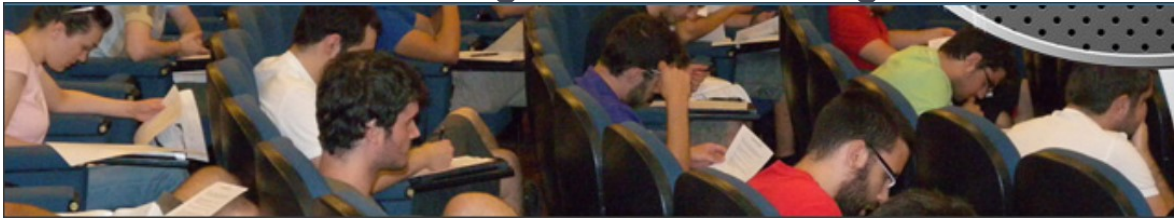
Τμήμα ▾ Σπουδές ▾ Έρευνα ▾ Δραστηριότητες ▾ Απόφοιτοι ▾ Υπηρεσίες ▾ Ανακοινώσεις ▾ Επικοινωνία ▾ Είσοδος



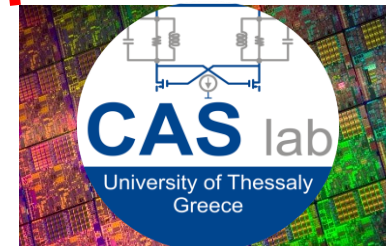
The Department of Electrical and Computer Engineering

▶ Teaching

- ▶ 5 year Bachelor of Engineering, **BEng**, Degree
- ▶ Accredited as an Integrated Masters Degree



0% Unemployment



▶ Academic Research and Development (R&D) Labs

- ▶ Circuits and Systems Lab, <https://caslab.e-ce.uth.gr/>
- ▶ Electronics Lab, <https://vedalab.e-ce.uth.gr/>
- ▶ Computer Systems Lab, <https://csl.e-ce.uth.gr/>
- ▶ Distributed And Network Algorithmics (DANA) lab, <https://dana.e-ce.uth.gr>
- ▶ Data Structuring and Engineering Lab, <https://dase-lab.e-ce.uth.gr/>
- ▶ Creative Technologies Learning Lab, <https://ctll.e-ce.uth.gr/>
- ▶ Network Implementation Testbed Lab, <https://nitlab.inf.uth.gr/>
- ▶ Smart Energy Policy and Networks Lab
- ▶ Signal Processing Lab



Life at the Department of Electrical and Computer Engineering

▶ Lectures – Early Years



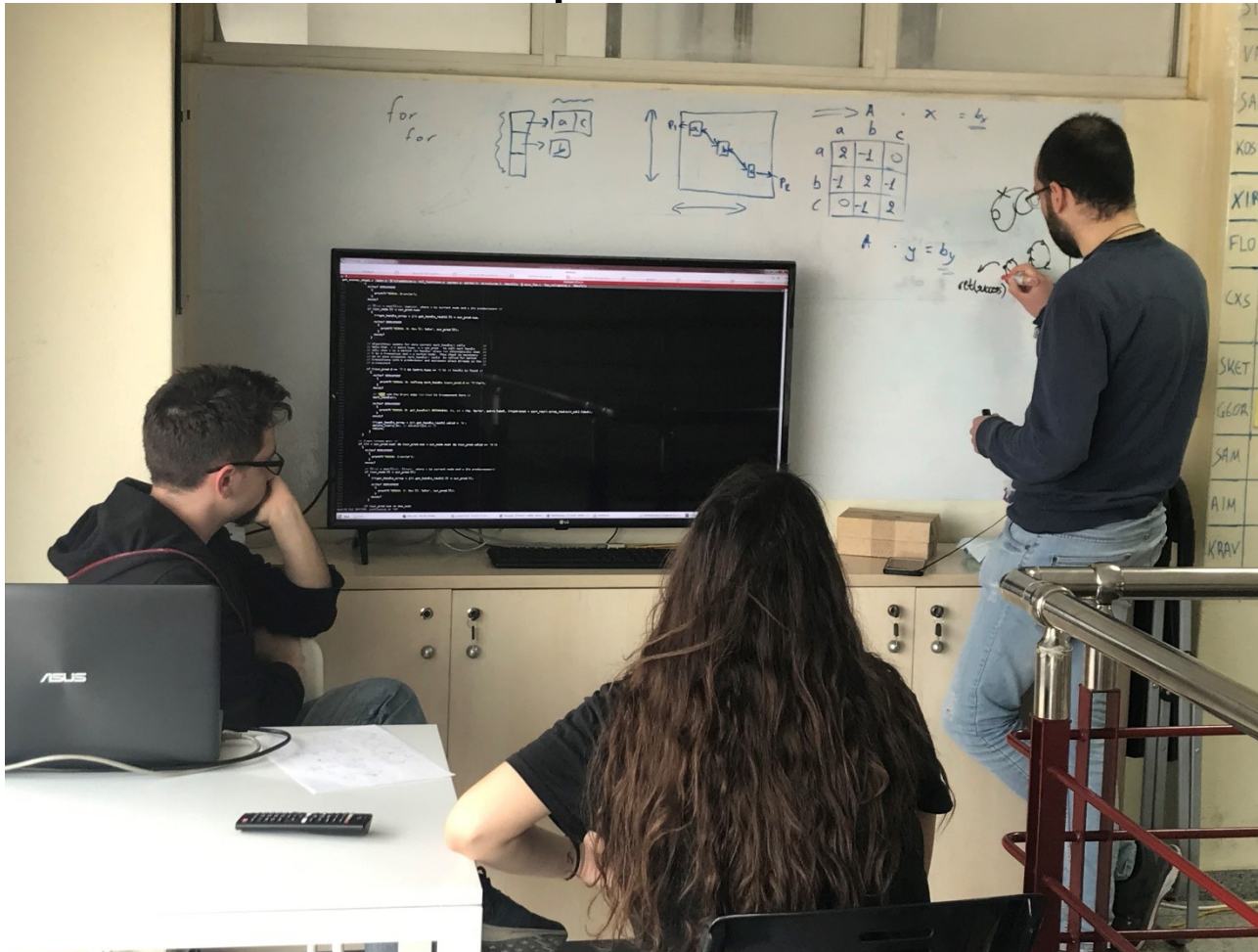
Life at the Department of Electrical and Computer Engineering

▶ Lectures – Later Years



Life at the Department of Electrical and Computer Engineering

► Research Groups and Labs



Life at the Department of Electrical and Computer Engineering



▶ Student Parties



Life at the Department of Electrical and Computer Engineering

▶ Research Groups and Labs



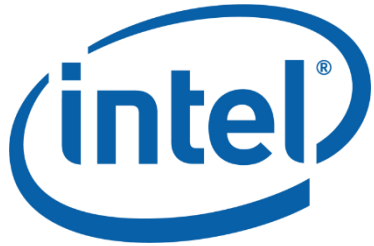
Life at the Department of Electrical and Computer Engineering

► Corporate Visits for Internships, Employment



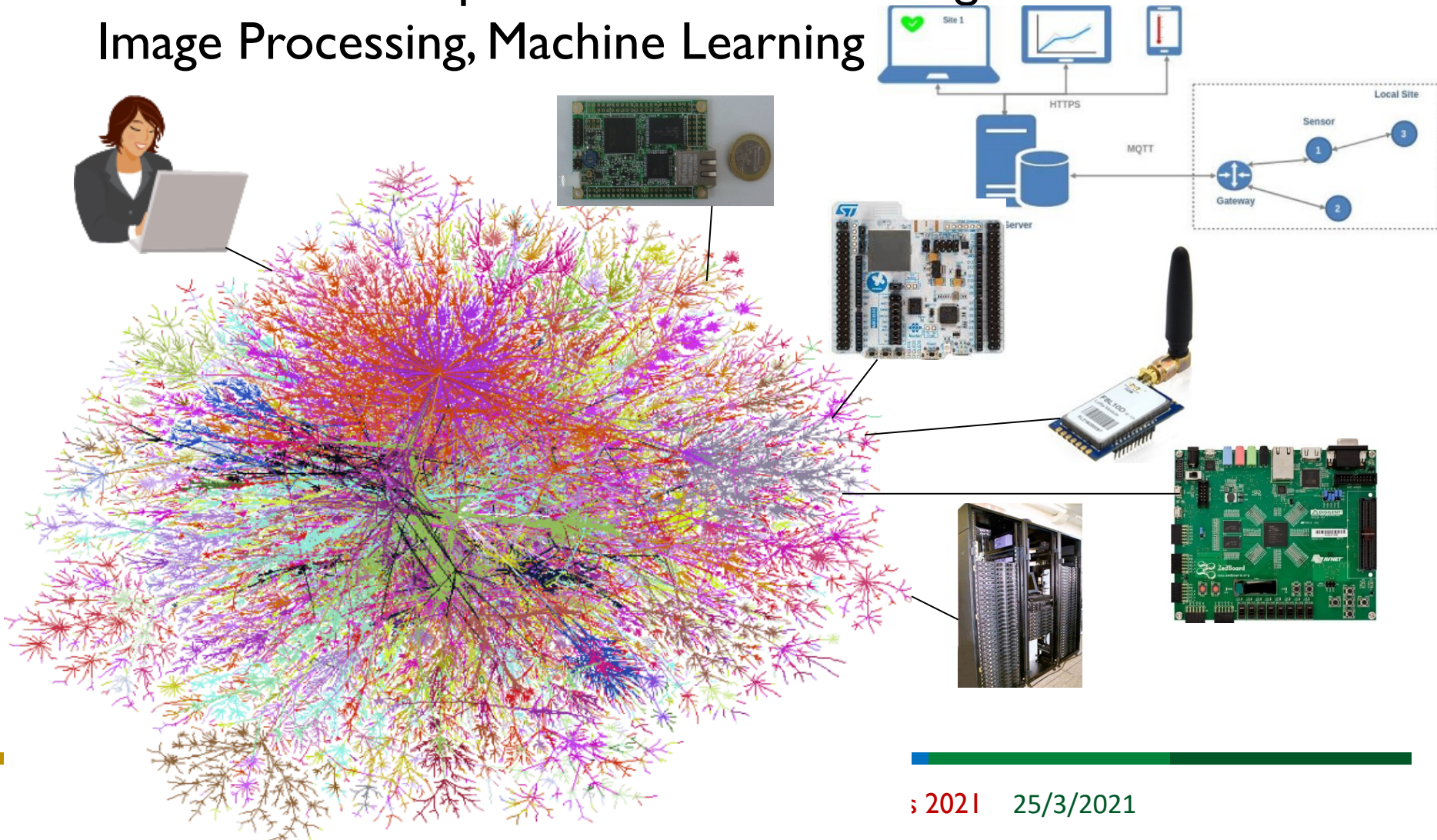


Employment Opportunities (a few...)



R&D at the Department of Electrical and Computer Engineering

- ▶ Software Development, Internet of Things, Cloud, Image Processing, Machine Learning



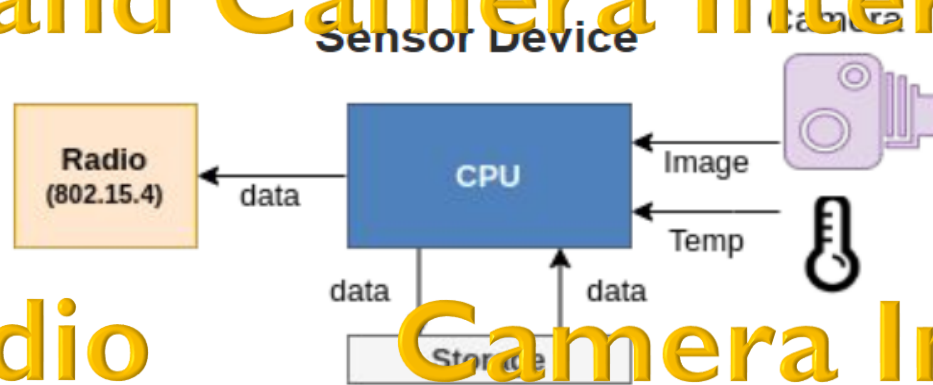
R&D at the Department of Electrical and Computer Engineering

- ▶ Software Development, Internet of Things, Cloud, **Computer Vision**



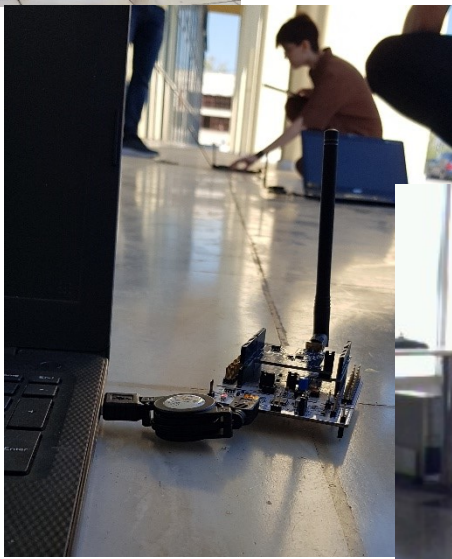
R&D at the Department of Electrical and Computer Engineering

Radio and Camera Interface



Radio

Camera Interface



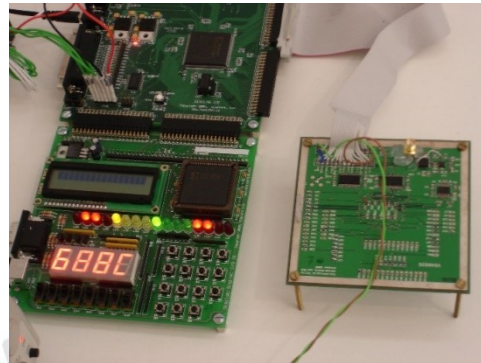
R&D at the Department of Electrical and Computer Engineering

OCR (Optical Character Recognition)

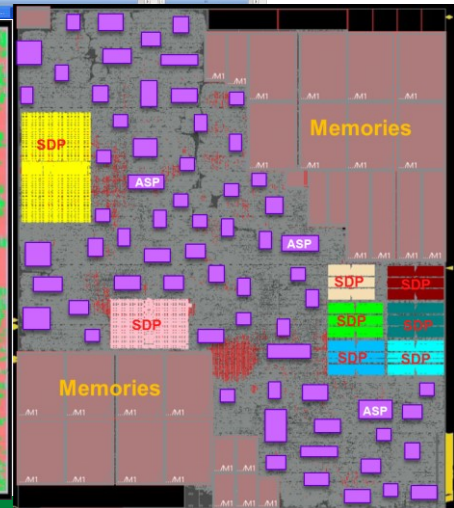
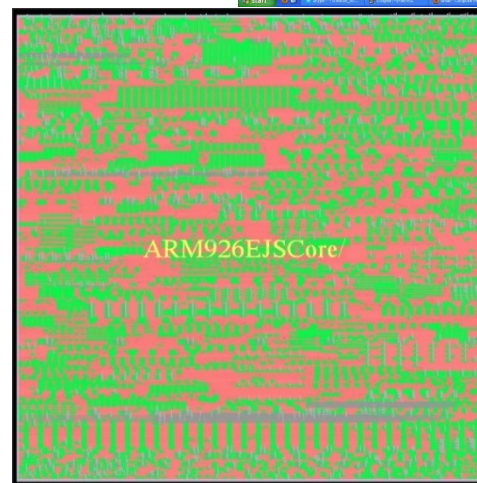
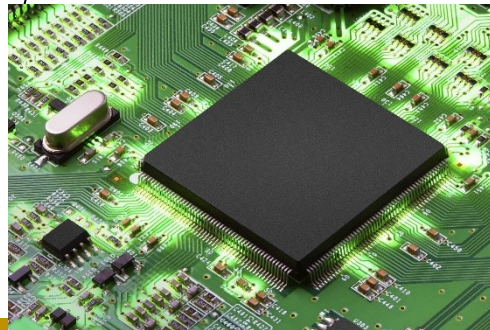
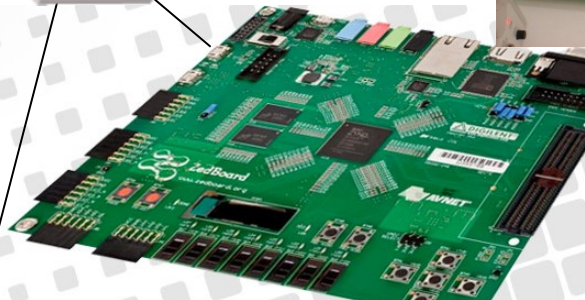
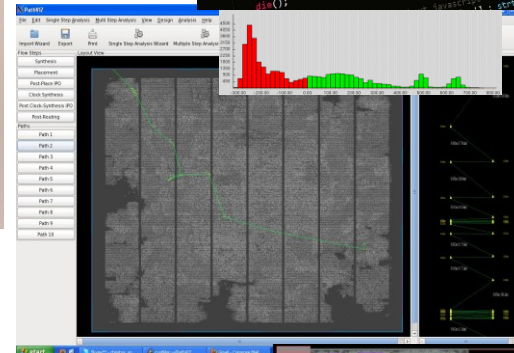
The screenshot displays a Linux desktop environment. On the left, a file manager window shows a directory named 'test_data' containing four PNG files: 3.png (505 bytes), 6.png (559 bytes), C.png (12,7 kB), and R.png (603 bytes). A small video window in the foreground shows a hand holding a camera over a green ZedBoard circuit board. In the background, a terminal window shows the command prompt 'root@zedboard-dpu-trd-v2019-1:~/ZedBoard/samples/OCR#' and a cursor. Overlaid on the terminal is the VokoscreenNG 3.0.8 application window, which is configured for audio recording. The 'Built-in Audio Analog Stereo' and 'Monitor of Built-in Audio Analog Stereo' options are checked. The 'Audiocodec' is set to 'vorbis'. The interface includes icons for various devices and a control bar at the bottom with buttons for 'Start', 'Stop', 'Pause', 'Play', and 'Folder'.

R&D at the Department of Electrical and Computer Engineering

Software Development for IC Design, Hardware Design



```
require_once APP_ROOT . '/includes/autoloader.inc.php';  
  
// Load configuration  
require_once APP_ROOT . '/config.php';  
require_once APP_ROOT . '/includes/psf_debug.php';  
if (!defined('PSF_CONFIG_FILE')) {  
    $tpl = new Template('templates/html/error_config.html');  
    echo $tpl . fetch();  
    die();  
}
```



CAD Software for Hardware Design

The image displays a CAD software interface for hardware design, showing three main views:

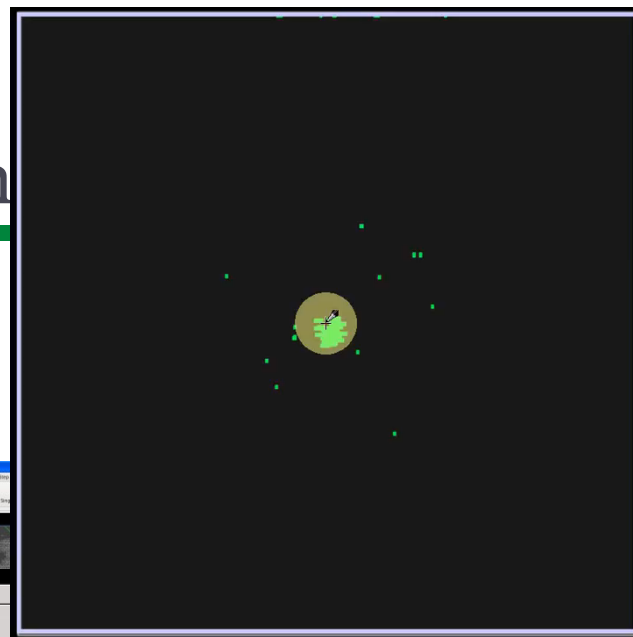
- Verilog Code (mr0.v):** A Verilog model for a master_read module. The code defines a module with inputs ari, pri, bpm, xack, di, aro, pro, breq, busyo, mrdc, do, csc0, and outputs csc1, csc2, busy0, bpmn, and csc1+.
- Logic Diagram (*mr0_workcraft [STG]):** A high-level logic diagram showing the flow of signals between components like ari, aro, pri+, pro+, pri-, breq, bpm, csc1, busyo, mrdc, xack, do+, di+, mrdc+, breq+, bpmn+, xack+, busy0+, and csc2+.
- Gate-Level Circuit (*mr0_techmap_ihp [circuit]):** A detailed gate-level circuit diagram showing the implementation of the logic using various gates (AND, OR, NOT, XOR) and inverters. The circuit is highly complex, with many gates and interconnections.

The interface also shows a terminal window at the bottom left with the command `sketopou@torreyridge DEMO1$` and a status bar at the bottom right with tabs for Output, Problems, javascript, and Tasks.

R&D at the Department of Electrical and Computer Engineering

- ▶ Software Development for IC Design, Hardware Design

Automated Placement Algorithms



The screenshot displays an EDA software interface with a menu bar (File, Edit, Tool Modes, View, Design, Placement Flow, Analysis, Help) and a toolbar. A 'Flow Steps' panel on the left lists: Synthesis, Placement, Post-Place I/O, CTS, Post CTS I/O, and Post-Routing. The main window shows a 'Layout View' with a diagram of interconnected blocks and a 'Welcome! Please Import Design Data to Begin...' message. On the right, a 'Placement Map' shows a grid of components including 'Memories', 'ASP', and 'SDP'.

Contact Details:

email: chsotiriou@eece.uth.gr, **skype:** [christos_sotiriou](https://www.skype.com/people/christos_sotiriou)

Conclusions

- ▶ Teaching and R&D go hand by hand at University Level
- ▶ The EECE Department excels at Teaching and R&D
- ▶ The EECE Department offers many opportunities
 - ▶ Both within and outside the University
- ▶ The EECE Department is a leading department in art, high-tech and innovation
 - ▶ Students may benefit from our research
 - ▶ Our R&D Laboratories are collaborating with many companies
- ▶ **Join us!**



**EECE
Department**

WE WANT YOU!