

ICOM 5047

# You are Cordially Invited to the Computer Engineering Design Course Final Presentations - Spring 2019

## 1 EMPOTRAO'S SOLUTION

**Team:** Misael Valentín, Luis Vega (PM), Kahlil Fonseca, Nelson Rodriguez

**Project:** Hurricane winds, atmospheric pressure, change in temperature and relative humidity are characteristics that affect engineering designs of airplanes, cars, ships and buildings. Wind tunnels are used to study the effects of these characteristics to improve the quality of the engineering designs. Project WindTel ("Wind Tunnel Telemetry") is a modular embedded application with the purpose of automating the aerodynamic data acquisition of the UPRM Surveying and Civil Engineering Department wind tunnel.



## 2 STYX LOGIC SOLUTIONS

**Team:** Angel L. Rodriguez Ortolaza (PM), Eduardo A. Rivera García, Elnois Norat Ortiz and Juan M. Agosto R.

**Project:** Styx Logic Solutions will contribute to investigate, design, and develop an automated system that will help to BiciCoop administer and provide the UPRM community a bicycle rental program. The system shall interact via Wi-Fi with a workstation prototype module that can identify bicycles in the system reading RFID tags. We will provide an accessible, secure and user-friendly system where the UPRM community can rent a bicycle.



## 3 CODING GEAR

**Team:** Ariel Torres Pérez, Yomaira Rivera (PM), Gustavo A. Hernandez Ortiz.

**Project:** The Academic Senate of the University of Puerto Rico - Mayagüez Campus is an academic community for establishment of academic norms. Currently, the Senate uses a combination of paper-based and technological resources in their operations. Thus, Whitestone proposes a polling web application prototype which facilitates the customization of a voting formulation, quorum monitoring, and validates electoral credentials with their voting privileges to allow real-time decision results. It also incorporates the participants' speech recordings (through a local computer microphone) and streaming to the meeting room's audio system.



## 4 MANGO BAJITO LLC

**Team:** Kelvin R. Roche Rivera, Andres R. Hernandez, and Luis R. Santiago Estrada (PM) .

**Project:** Project SCHOP , presented by Mango Bajito Software LLC , is a web portal designed to optimize and assist the stakeholders involved in the supply chain cycle of products at Supermercados Mr. Special . Supporting a reduction in time in the workloads of purchase orders, between the supermarket, the headquarters and the suppliers. This will end with a full synchronized experience for the entities using the portal, giving a fast and better performance overall.



## 5 NATURAL CONNECTION

**Team:** Ivan Caballero, Nelson Alemar (PM) and Edwin Rivera

**Project:** SoflA is a personalizable virtual assistant and the core of our outbound contact center. SoflA will help offices by automating their appointment confirmation process and, therefore, increasing their appointment attendance rate. All this while also being adaptable to various types of offices.



## 6 EPA

**Team:** Desireé Rodriguez Zeno, Anderson Roman R. (PM)

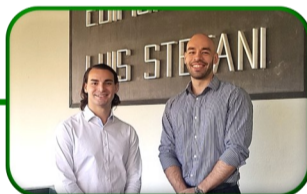
**Project:** The Touch Time Tool is a data management web application developed for Hewlett Packard Enterprise with the aim of ensuring data consistency and facilitate interdepartmental communication of said data in a secure way. Through the application, the different departments will have access to the latest data in the system at all times which will allow them to generate reports based on the information more efficiently.



## 7 RM WEB SOLUTIONS

**Team:** Rogelio Díaz Vera (PM) and Miguel A. Negrón Brand

**Project:** RM Web Solutions will be developing a web application for a local photography company in order to maximize its profits. The product will improve their current business processes so that the customers do not have to physically go to the studio in San Juan to complete purchases. The web application will provide a sales system so that customers can buy their photographs online from the comfort of their home. The web application will help promote the company online in order to get new customers using Search Engine Optimization techniques



## 8 INVENIO SYSTEMS

**Team:** Christian J. Cancel, José J. Marín, Juan R. Henríquez, Johnny R. Sánchez (PM), Edgardo A. Muñiz.

**Project:** The Elastic Wave Acquisition System is a high resolution Data Acquisition System designed for use in Non-Destructive Testing applications. The system consists of a series of individual modules called Data Acquisition Modules (DAM), that provide an interface to the sensor channels. The system provides a mobile application is used for user interaction in which the desired configuration parameters to be used during each experiment can be defined. The mobile application also has the functionality of providing basic signal processing operations on the acquired data.



## 9 EZB DEVELOPERS

**Team:** Elvin O. Ortiz Collazo, Félix G. González Garcés, and Harry Hernández Rivera (PM)

**Project:** EZBillboards is an all-in-one system that provides users the ability to rent the UPRM's billboard, upload their artwork, view the hour per hour availability and pay online. In addition, this platform is eco-friendly since every required document will be digitalized. Furthermore, it helps reduce the amount of workload of employees working for our client. In conclusion, EZBillboards is a unique system in Puerto Rico that allows users to promote their products or services in a very efficient and convenient way.



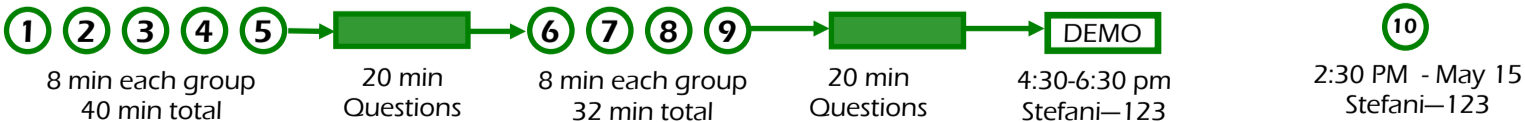
## 10 COLEGIO ALL-STARS

**Team:** Diego J. Capre Ramirez de Arellano, Cristian G. Duque González, Eric J. Barbosa López, Víctor J. Fermín Torres, and Jan A. Robles Berrios (PM)

**Project:** Demonstration Data Management System will help La Aguadillana with the data acquisition process of their food demonstrations. This web platform will provide standardized and dynamic forms in order to collect the data and generate statistical reports from food demonstrations. Therefore, La Aguadillana would have an optimized data acquisition process and real-time reports to make better decisions in order to increase their sales. or services. Providing aide in the process of designing, manufacturing and promoting projects in Puerto Rico.



## Schedule



## Presentations on May 16<sup>th</sup>, 2019

Oral presentations : 2:15 pm – 4:15 pm @ Edificio Stefani – S-113  
Demo: 4:30-6:30 pm Stefani-123