

## **SECTION 1**

# EMBEDDED SYSTEMS HARDWARE AND SOFTWARE

**Room 109** 

Dr. Dirk Van Merode

**Ing. Patric Pelgrims** 

11.00 – 13.00 Proprietary data transfer pro tocol between personal computers and microcontrollers STM32F4DISCOVERY development method Andrey Babash, Valeriy Kvashnin, Alexander Tarasov

Information - measuring system FOR vehicle and transported CARGO registration using Raspberry PI 2 **Pavlo Sahaida, Serhii Dobriak** 

Methods to study different interfaces and using of them in Altium NanoBoard 3000XN Azat Smbatyan

Embedded systems: hardware and software **Gevorg Margaryan, Mher Markosyan** 

Overhead Crane Installation for Remote Laboratory Using Embedded Systems Mykola Ivchenkov, Borys Timoshenko, Serhii Filatov

Development of a LabVIEW Program for a Helmholtz Coil System Based on NI PXI Platform Amalia Hakobyan, Lusine Hovhannisyan, Serob Muradyan

Conveyor Model for Embedded Systems Study Viacheslav Ohmak, Galyna Tabunshik

Cleaning Head Controller for Photovoltaic Panel Gagik Kirakosyan, Vachagan Melkonyan

Embedded systems: hardware and software

Gevorg Margaryan

Water Flow Meter Design

Norik Petrosyan, Petush Shirinyan, Vachagan Melkonyan, Gegham Karoyan

13.00 – 14:00 LUNCH IN SD NITRA

**14.00 – 15.00** Controller of Motion Parameters

Norik Petrosyan, Petush Shirinyan, Gegham Karoyan, Vachagan Melkonyan

Automatic Control System of Regulation of Smart House Lighting Ia Mosashvili, Tamar Lominadze, Salome Mukhashavria

Control Problems of Smart Parking on the Example of PASYARD System Ia Mosashvili, Tamar Lominadze, Nika Kruashvili

Using of new methods of growing of reliability of Control of Embedded Systems

Giorgi Chachua, Ia Mosashvili

Remote Heart Rate Monitoring Embedded System

Serob Muradyan, Amalya Mkhitaryan

15.00 – 15.30 COFFEE BREAK

15.30 - 17.00 The role of "embedded systems" in the preparation of qualified specialists

Amalya Mkhitaryan, Gohar Avetisyan

Development and design of conference-translation systems is based on digital radio communication

Azat Smbatyan, Areg Kamalyan

Bluetooth Quadcopter Control System

Joren Mommaerts, Dirk Van Merode

Optoelectronic display system data based on matrix display

Oleg Subotin, Evgeniy Donchenko

Teaching Distributed and Parallel Systems with APP4MC

Robert Höttger, Uwe Lauschner, Phil Närdemann, Philipp Heisig, Carsten Wolff, Erik Kamsties, Burkhard Igel

Matlab Simulink application to program microcontroller's stm32f4discovery

Vladyslav Kvashnin, Babash Andrey, Valeriy Kvashnin, Yuliya Lazutkina, Galina Klimenko

Software and Hardware for controlling the Robot "Hand"

Ia Mosashvili, Tamar Lominadze, Salome Oniani

Software Suite for Device Interaction Based on OS Android with Arduino by Bluetooth Protocol

Daniil Pavenko, Oleksandr Altukhov

The Features of "C" Language Teaching Methods in Embedded Systems

Anna Grigoryan, Siranush Sevyan

Increase of effectiveness of Embedded Systems of Web based vehicle and its practical use

Teimurazi Sakhelashvili, Ia Mosashvil



### **SECTION 2**

# REMOTE ENGINEERING AND LABORATORIES Room 110

Dr. Ing. Karsten Henke

Dr. Ing. Heinz - Dietrich Wuttke

11.00 – 13.00 The Organizing of Remote Laboratory Operations for Multiple Users

Ruzanna Sargsyan, Lilit Amiryan

Organization of remote training of future engineers with online resources

Kateryna Vlasenko, Oleksandr Tarasov

A mechanism for automatic control on the basis of electromechanical model is designed for puppets and its use in distance learning **Mher Markosyan, Aram Manukyan, Edgar Harutyunyan** 

Control of virtual object using physical device

Tornike Tchikadze, Guram Chaganava, Bakari Baratashvili, Tamar Gogua, David Kakulia

The Program Implementation of Remote Laboratory Operations for Multiple Users **Hrachya Melkonyan, Mher Veziryan** 

Extending the functionality of a simple SOHO router (Small Office / Home Office)

Tigran Avetisyan, Ruzanna Sargsyan

Multipurpose Educational System based on Raspberry Pi

Galyna Tabunshchyk, Dirk Van Merode, Olha Petrova, Viacheslav Ohmak

#### 13.00 – 14.00 LUNCH IN SD NITRA

14.00 – 15.00 SkyRadar – Virtual Lab on Radars and Air Traffic Management

Sergii Morshchavka, Ulrich Scholten

A Low Cost Lecture Webcasting Platform for Limited Bandwidth: Towards an Integrated Platform for an Engineering Curriculum Content Sharing and Management among Universities

Wasswa William, Martin Ngobye, Annabella Habinka

Optimization for prototyping embedded systems by using Raspberry Pi 2 and MATLAB Simulink

Oleksii Sheremet, Volodymyr Perepelytsia

Synthesis of Neural Network Regulator for Electrocontact Surfacing on the Basis of Fuzzy Control Module Olena Berezshnaya, Aleksey Razzhivin, Ekaterina Zubenko



# SECTION 3 EDUCATION AND TRAINING Room 126

Prof. Ing. Tomáš Kozík, DrSc Prof. PaedDr. Alena Hašková, PhD. 11.00 – 13.00 Rewarding Projects in the Technological Education in Hungary Zsolt Benkő, Gergely Kun

Improvement of educational process based on software development for virtual and remote labs Oleksandr Tarasov, Pavlo Sahaida, Liudmyla Vasylieva

Developing the Methodology of Teaching the Subject "Operating Systems" for Embedded Systems **Hasmik Hakobyan, Shushan Nigoyan** 

Implementation of "Embedded Systems" Disciplines in Computer Science Students Training Vadym Abramov, Oksana Lytvvn

Organization of the future engineers' independent work in the blended learning of probability theory and stochastic processes **Elena Chumak** 

Integration of IoT Technologies to IT Professionals Educational Process

Anzhelika Parkhomenko, Andriy Parkhomenko, Yaroslav Zalyubovskiy, Marina Kalinina

Altium Designer as an Opportunity for Students **Aramyan Yelena** 

#### 13.00 – 14.00 LUNCH IN SD NITRA

14.00 – 15.00 Modernization of Mobile Object Control System based on Raspberry Pi and Arduino platforms Anzhelika Parkhomenko, Oleksii Kravchenko, Dmytro Kravchenko, Olga Gladkova

On the Issue of Spiritual Management in Education Sonya Zakaryan, Gohar Avetisyan

3D - printing Studying as a Component of Modern STEAM Education Nataliia Morze, Liliia Varchenko-Trotsenko

Training of Primary School Teachers for the Implementation of Educational Robotics **Morze Nataliia, Gladun Mariia** 



## **SECTION 4**

## INTERNATIONAL PROJECT MANAGEMENT Room 127

Dr. Ing. Peter Arras, PhD.

Prof. Ing. Galyna Tabunshschyk, PhD.

11.00 – 13.00 International Project Management Peculiarities

Marine Ghazaryan

Some Problems and Challenges in International Project Management Gohar Avetisyan, Mher Markosyan

Competency - based Approach for Internationalization and Interdisciplinary Study Courses in Project Management Olga Mikhieieva

Internationalization Strategy in Zaporizhzhia National Technical University Sergii Byelikov, D. Pavlenko, Galyna Tabunshchyk, L. Duiko

Effect of Consortium Characteristics on Outcome of EU- funded Research Projects **Ala Nuseibah** 

International Project Management Decision Tools **Peter Arras, Galyna Tabunshchyk** 

13.00 – 14.00 LUNCH IN SD NITRA