



INNOVATION IN ENGINEERING A NORTH AMERICAN PERSPECTIVE

1ST SUMMER CAMP
July 19-20, 2011
Cité des Sciences à Tunis

SCHEDULE – OVERVIEW

○ Day 1

- 8:30 am to 9:00 am: Opening
- 9:00 am to 10:00 am: Keynote/Motivational Talk I (speaker TBC) + Break
- 10:00 am to 12:00 pm: Round Tables I on Innovation in Engineering
- 12:00 pm to 1:30 pm: Lunch
- 1:30 pm to 3:30 pm: Testimonials I – Success Stories of NA Tunisian Engineers
- 3:30 pm to 5:30 pm: Interactive/Brainstorming session I
- 6:00 pm – : Generational Challenge (sports match(s)) NA vs. Locals

○ Day 2

- 8:30 am to 10:00 am: Keynote/Motivational Talk II (speaker TBC) + Break
- 10:00 am to 12:00 pm: Round Tables II on Innovation in Engineering
- 12:00 pm to 1:30 pm: Lunch
- 1:30 pm to 3:30 pm: Testimonials II – Success Stories of NA Tunisian Engineers
- 3:30 pm to 5:30 pm: Interactive/Brainstorming session II
- 5:30 pm to 5:45 pm: Draw of Attendance Prizes
- 6:00 pm – : Reunion/Reception for North American Graduates



SCHEDULE – DAY 1

- 8:30 am to 9:00 am: Opening
- 9:00 am to 10:00 am: Keynote/Motivational Talk I (speaker TBC) + Questions
- 10:00 am to 10:20 am: Coffee Break
- 10:20 am to 11:05 am: Round Table on the Need for Innovation
- 11:05 am to 11:15 am: Body break
- 11:15 am to 12:00 pm: Round Table on Engineers and the Engineering Profession at the Heart of Innovation
- 12:00 pm to 1:30 pm: Lunch
- 1:30 pm to 3:30 pm: Testimonials I – Success Stories of NA Tunisian Engineers
 - 1:30 pm to 1:50 pm: Speaker 1
 - 1:55 pm to 2:15 pm: Speaker 2
 - 2:20 pm to 2:40 pm: Speaker 3
 - 2:45 pm to 3:05 pm: Speaker 4
- 3:05 pm to 3:30 pm: Coffee Break
- 3:30 pm to 5:30 pm: Interactive/Brainstorming session I
- 6:00 pm – : Generational Challenge (sports match(s)) NA vs. Locals



SCHEDULE – DAY 2

- 9:00 am to 10:00 am: Keynote/Motivational Talk I (speaker TBC) + Questions
- 10:00 am to 10:20 am: Coffee Break
- 10:20 am to 11:05 am: Round Table on ingredients for creative thinking
- 11:05 am to 11:15 am: Body break
- 11:15 am to 12:00 pm: Round Table on studying in North America
- 12:00 pm to 1:30 pm: Lunch
- 1:30 pm to 3:30 pm: Testimonials II – Success Stories of NA Tunisian Engineers
 - 1:30 pm to 1:50 pm: Speaker 1
 - 1:55 pm to 2:15 pm: Speaker 2
 - 2:20 pm to 2:40 pm: Speaker 3
 - 2:45 pm to 3:05 pm: Speaker 4
- 3:05 pm to 3:30 pm: Coffee Break
- 3:30 pm to 5:30 pm: Interactive/Brainstorming Session II
- 6:00 pm – : Reunion



INNOVATION IN ENGINEERING – A NORTH AMERICAN PERSPECTIVE

- 1st round table: the need for innovation
 - Importance of engineering innovation for economic development
 - The North American trends for engineering innovation
- 2nd round table: engineers and the engineering profession at the heart of innovation
 - The engineers role in innovation and in economic development
 - How a student should approach and engineering education
 - What an engineer should and should not be
- 3rd round table: ingredients for creative thinking and innovation
 - Critical analysis of situations
 - Recognizing opportunities
 - Mastery of tools
 - Problem solving
- 4th round table: studying in North America



INTERACTIVE & BRAIN STORMING SESSIONS

- Free interactive sessions – one on one discussions, group discussions, visit of demo stands, etc.
- Brainstorming around specific topics (TBA)
 - Mini ***interactive*** workshops with students
 - Each session will be supervised by one more of the presenters (counsellors)
 - The goal is to guide student in a process of problem solving
 - Emphasis should be placed on promoting creative thinking during the session
 - Counsellors should highlight pitfalls and encourage perseverance
 - Push the students' ideas as far as possible



SPEAKERS



KEYNOTE/MOTIVATIONAL TALK I



- Ken Clayton – SolidWorks Corp.

As Vice President of Worldwide Sales for DS SolidWorks, Ken Clayton leads the sales strategy and execution efforts of the Dassault Systèmes Professional Channel. With more than 300 FTEs and 335 Value Added Resellers, the DS Professional Channel has evolved from selling a single product to a complete family of solutions, and also includes other Dassault Systèmes brands.

About SolidWorks



Dassault Systèmes SolidWorks Corp. offers complete 3D software tools that let you create, simulate, publish, and manage your data. SolidWorks products are easy to learn and use, and work together to help you design products better, faster, and more cost-effectively. The SolidWorks focus on ease-of-use allows more engineers, designers and other technology professionals than ever before to take advantage of 3D in bringing their designs to life.



KEYNOTE/MOTIVATIONAL TALK II

- Name: (Canadian) in the process of being confirmed



TESTIMONIALS – SUCCESS STORIES OF TUNISIANS IN NA

- AmpliX Inc. & iRadio Lab – (Fadhel Ghannouchi)
 - Vestec & PAMI center – (Fakhreddine Karray)
 - itRobotics Inc. – (Fathi Ghorbel)
 - EMWorks Inc. – (Ahmed Khebir)
 - Mechatronics and Microsystems Design Laboratory – (Ridha Ben Mrad)
 - XenoPort Inc. & Merck – (Sami Karaborni)
 - CAE Inc. – (Mehrez Hached) TBC
 - ISR Technologies & Lacime Lab – (Ammar Kouki)
 - Faouzi Kossentini – (UB Video)
 - Bessem Jlidi/Lazhar Mazlout – (General Scientific, Pratt & Whitney/Lucent)
 - Kamel Mekki – (Acoustica & ESI Group)
 - Naim Ben Hamida (Ceana)
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- Some product demos will be on display during the interactive session



AMPLIX INC. & IRADIO LAB



About the company

Founded in 1998 in Montréal, Canada, AmpliX Inc. developed and manufactured DSP-controlled predistortion linearizers, linearized power efficient amplification systems and their sub-components for applications in broadband wireless ground and satellite communications systems covering the *L*, *S*, *C*, *X*, *Ku*, *K* and *Ka* band frequencies. AmpliX was acquired in 2001 by Mitec Telecom, a publically traded company.

Presenter: Fadhel Ghannouchi



Education

B.S. (1983): Ecole Polytechnique
Montréal

M.S. (1984): Ecole Polytechnique
Montréal

Ph.D. (1991): Ecole Polytechnique
Montréal

Current Position

Professor of Electrical Engineering
Director iRadio Lab
University of Calgary, Alberta,
Canada



Testimonials – Success Stories of Tunisians in NA

VESTEC INC. & PAMI CENTER



About the company

Vestec aims to popularize, commoditize and demystify speech recognition by leveraging unique Artificial Intelligence (AI) technologies to create powerful, low-cost, standards-based ASR and NLU engines. We believe speech recognition has not enjoyed widespread acceptance due to: (a) high cost of speech enabling products; (b) poor recognition accuracy of speech software; (c) poor semantic interpretation of recognized results; and (d) overall difficulty of speech application development and maintenance.

Presenter: Fakhreddine Karray



Education

Ing. Dipl. (1984): ENIT – Tunisia
Ph.D. (1989): University of Illinois
at
Urbana-Champaign

Current Position

Professor of Electrical Engineering
Associate Director PAMI Center
University of Waterloo, Ontario,
Canada



ITROBOTICS INC. & RISYS LAB



About the company

Founded in 2000 in Houston, Texas, itRobotics is a pioneering technology company operating to provide state of the art non-destructive inspection service for small diameter energy pipes using the latest robotic technology. In November 2002 it established its design and manufacturing facilities in Stafford, Texas.

Presenter: Fathi Ghorbel



Education

- B.S. (1985): Penn State University
- M.S. (1987): Carnegie Mellon University
- Ph.D. (1991): University of Illinois at Urbana-Champaign

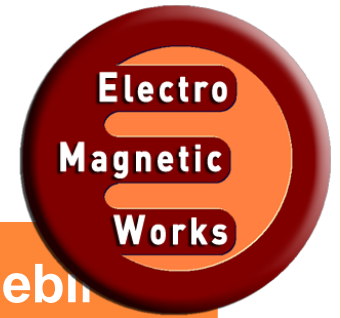
Current Position

Professor of Mechanical Engineering
Director RiSYS Lab
Rice University – Texas, USA



Testimonials – Success Stories of Tunisians in NA

EMWORKS INC.



About the company

Founded in 1994 in Montréal, Canada, EMWorks Inc. develops and sells electromagnetic and magnetic software and simulation tools as an Add-in to SolidWorks®. The company's flagship products are EMS (for electrical machines and mechatronics), HFWorks (for RF, Microwave & Wireless), and ATLASS for transmission lines and waveguides. The company products are sold worldwide and its clients include many multi-national companies.

Presenter: Ahmed Khebi



Education

B.S. (1985): Penn State University
M.S. (1986): Penn State University
Ph.D. (1989): University of Illinois at Urbana-Champaign

Current Position

President of EMWorks Inc.
Adjunct Professor at ÉTS





MMD LABORATORY AND SR MICROSYSTEMS INC.

About the laboratory and SR Microsystems

SR Microsystems is pursuing the commercialization of patented Micro Electro Mechanical Systems (MEMS) actuation technology used to drive micromirrors and lenses for Head-Up Display, autofocus in cell phone cameras and high performance MEMS based vector displays. Research at the Mechatronics and Microsystems Design (MMD) Laboratory is focused on precision systems, digital microfluidics and MEMS. Application areas include photonics, biomedical devices, genomics & proteomics, positioning in space, adaptive optics and automotive display systems.

Presenter: Ridha Ben Mrad



Education

B.S. (1986): Penn State University (Mech.)
M.A.Sc. (1988): University of Michigan (Mech.)
M.S. (1991): University of Michigan (Elec.)
Ph.D. (1991): University of Michigan

Current Position

Professor and Associate Chair, Research Director MMD Laboratory
Director, Institute for Robotics and Mechatronics
University of Toronto, Ontario, Canada

Co-founder: SR Microsystems Inc.



BIOPHARMACEUTICAL COMPANIES



About the companies

XenoPort Inc., is a biopharmaceutical company focused on developing a portfolio of internally discovered product candidates that utilize the body's natural nutrient transporter mechanisms to improve the therapeutic benefits of drugs.

Merck & Co. Inc., is one of the largest pharmaceutical companies in the world. Merck discovers, develops, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures

Presenter: Sami Karaborni



Education

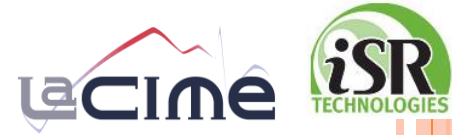
B.S. (1986): Penn State University
M.S. (1991): University of Florida
Ph.D. (1990): University of Florida

Current Position

Executive Director
XenoPort, Inc.
Santa-Clara, California, USA



ISR TECHNOLOGIES & LACIME LAB



About the companies

ISR Technologies designs and builds modems for radio equipment manufacturers providing **on-the-fly** reprogrammable communications.

Based on specific client needs, ISR develops custom hardware, software, and firmware for both prototype and products. The company offers real-time reconfigurable platforms and satellite modems for meshed networks.

Presenter: Ammar Kouki



Education

- B.S. (1985): Penn State University
- M.S. (1987): Pens State University
- Ph.D. (1991): University of Illinois at Urbana-Champaign

Current Position

Professor of Electrical Engineering
Director LACIME Lab
ÉTS, Montréal, Canada



FAOUZI KOSSSENTINI – UB VIDEO & eBRISK



About the companies

UB Video, which was founded in 2000 and became a world-wide leader in H.264 video encoding technology, developing products that are widely used today in the video conferencing and broadcast markets. UB Video was acquired by Cisco in February 2006. eBrisk Video is Canadian-based company and a leading developer of video compression algorithms.

Presenter: Faouzi Kossentini



Education

- B.S. (1989): Georgia Tech.
- M.S. (1990): Georgia Tech.
- Ph.D. (1994): Georgia Tech.

Current Position

President & CEO eBrisk Video, Inc.



KAMEL MEKKI – ACOUSTICA & ESI GROUP

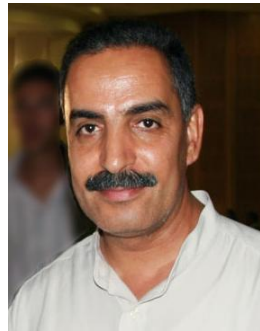


About the companies

ACOUSTICA is an engineering firm, specialized in vibro-acoustics in buildings, industry and environment. The company offers services using state of the art instrumentation and 3D software tools.

ESI group is a world leading software editor for the numerical simulation of prototypes and manufacturing process engineering in applied mechanics.

Presenter: TBD



Education

B.S. (1985): Michigan State
M.S. (1987): Penn State
Ph.D. (1991): Michigan State

Current Position

President & CEO of Acoustica





OPMAXX INC. & NORTEL/CIENA

About the company

Co-Founded Opmaxx Inc. in 1994 in Montreal and moved to Portland in 1996, USA. Opmaxx developed Tools and Silicon IP for Mixed Signal test. Opmaxx was acquired in 1999 by Credence Microsystems, a publically traded company.

Ciena Corporation provides communications networking equipment. Ciena is the market leader in Coherent Optical Transport. Ciena//Nortel was first to release a 40 Gs/s and 100 Gs/s Coherent Optical solutions

Presenter: Naim Ben-Hamida



Education

B.S. (1989): Université laval Quebec
M.S. (1991): Ecole Polytechnique
Montréal
Ph.D. (1996): Ecole Polytechnique
Montréal

Current Position

Senior Manager , Mixed-Signal Design
& Test
Optical Transport Division
Ciena, Ottawa, Canada



Testimonials – Success Stories of Tunisians in NA

OMINIA COM

About the companies

ournisseur à la base de solutions et services de télécommunication, servant les opérateurs et les fournisseurs de services en Afrique et au Moyen Orient, **OMNIACOM** a décidé de se diversifier dans ses activités et à étoffer son portefeuille de services pour mieux servir ses clients et partenaires. Parmi les nouveaux services mis en place, l'IT, le WEB et l'univers du Multimédia en général constituent son nouveau cheval de bataille.

Presenter: Samir Kallel



Education

B.S. (198?):

M.S. (198?):

Ph.D. (19??):

Current Position

CEO OmniaCom

Tunis, Tunisie

