



UNIVERSITÉ BLIDA 1
FACULTÉ DE TECHNOLOGIE
DÉPARTEMENT DE L'ELECTRONIQUE

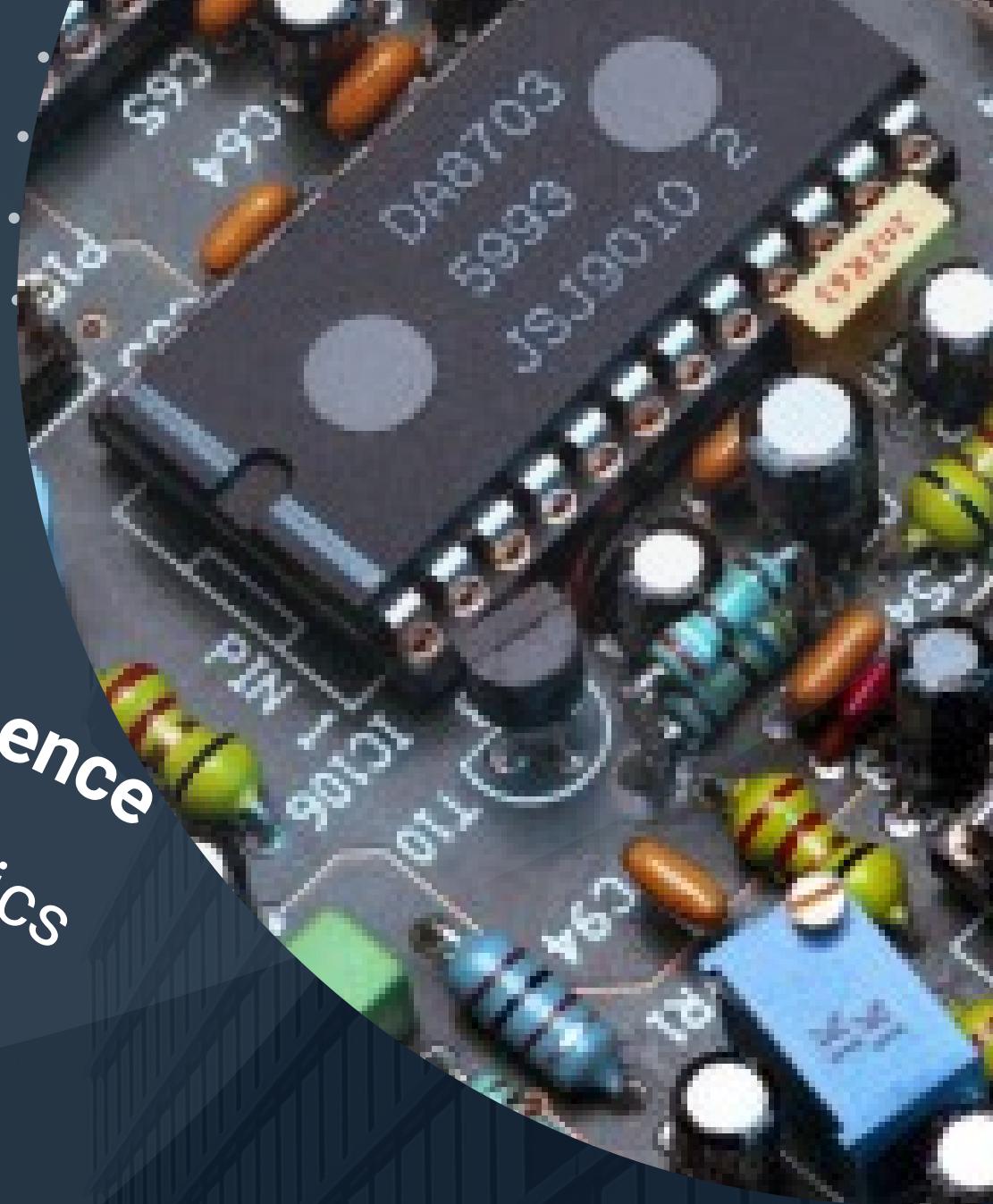
JOURNÉE SCIENTIFIQUE

Formation Doctorale

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BIBLIOTHEQUE CENTRALE

Artificial Intelligence
MicroElectronics
Industry 4.0



Gaham Mehdi



Chercheur au CDTA

L'Industrie 4.0, concept multifacettes, décrit la transition vers une nouvelle ère industrielle. L'Industrie 4.0 peut être considérée à la fois comme un ensemble de technologies et comme un paradigme de transformation digitale de la production. L'Intelligence Artificielle a connu des développements applicatifs énormes ces dernières années, et s'intrigue méthodologiquement dans les différentes facettes des technologies 4.0.

Talk 1 - 9H30 -10H30 : Industrie 4.0 et Intelligence Artificielle

Bengherabi Messaoud



Chercheur au CDTA

Talk 2 -10H30-11H30 : AI Biometric Recognition Using Face and Voice: State-of-The Art, Applications and Challenges

In this talk, the main goal is to present a general overview of automatic speaker and face recognition systems. Basic principles, definitions and prerequisites State of the art in speaker and face recognition: from shallow to deep learning approaches. Description of the second-generation biometric systems: new challenges and new AI solutions. Research challenges.

Youcef Fouzar



Senior manager
Microchip Technology

Talk 3 -11H30-12H30 : Low power challenges in IoT systems

A global IoT ecosystem will create a world in which every product, every piece of industrial equipment, and every healthcare device is connected to larger networks. A world of IoT devices will primarily require sensors and integrated circuits to function. IoT will play an important role in the future of semiconductors due to consumer and industry demand for connected devices. Reducing power consumption to operate these devices will be a major technical challenge, especially for battery-powered applications



contact : aitsaadi_hocine@univ-blida.dz
<https://www.univ-blida.dz/faculte-de-technologie/actualites>

Youcef Fouzar



Youcef Fouzar, Senior manager at Microchip Technology working on analog and mixed signal designs for high-speed communication. Youcef has over 20 years of professional experience and expertise in microelectronics, hardware, and software developments. In fact, before joining Microchip, he held various key technical positions within large high-tech companies such as Ciena Corporation, Huawei Technologies Canada, TSMC, Advanced Micro Devices (AMD), Synopsys Inc., Zarlink Semiconductor and Mitel Networks. At the end of 2013, Youcef founded Sidratec, Inc., an innovative start-up specialized in hardware and software solutions for IoT applications. As the executive director and founder of Sidratec, Youcef was responsible for the overall management of the company, vision, strategic planning, technical management, budgeting, development of new products. Youcef received his doctoral degree (Ph.D) in 2004 in electrical engineering from the Ecole Polytechnique de Montreal, Canada. He also received a master's degree in science (M.Sc.) in 1996 and a bachelor's degree of Science (B. sc.) in electrical engineering in 1995 from the Polytechnic University of Kharkov, Ukraine.

Bengherabi Messaoud



Bengherabi Messaoud is the head of the biometric and multimedia security team at the "Centre de Développement des Technologies Avancées" – CDTA- Algiers,-Algeria, with more than 15 years' experience working on voice and face biometrics. He organized the first Algerian summer school on biometrics ASSB 2010 and served as lecturer and poster chair of the IEEE biometric council winter school on biometrics held in KUALA LAMPUR-2014-. He leaded two national project on voice and voice biometrics I the period 2012-2014. These two projects were selected among the restricted list of "projets valorisables". He served as a reviewer in many IEEE transactions journals and many pattern recognition and computer vision top conferences.

Gaham Mehdi



Gaham Mehdi est Maitre de recherche au CDTA et Docteur en Control des Processus et Robotique de l'USTHB. Ingénieur en Productique, il intègre le CDTA en 2007 après avoir obtenu un Magister en Automatique, Robotique et Informatique Industrielle de l'EMP. Membre de l'équipe Systèmes Robotisés de Production (SRP) de la Division Productique et Robotique (DPR), il lance le projet R&D « Interaction et Simulation Avancées dans les Systèmes Cyber-Physiques de Production »en 2014 et en adéquation et anticipation du développement international de la thématique Industrie 4.0. Depuis 2017 il est en charge du projet à impact socio-économique « Plateforme Industrie 4.0 » portant sur la digitalisation industrielle. Ses recherches portent sur le pilotage distribuées et par le produit des systèmes de production, les approches IA pour la conduite décisionnelle et l'ordonnancement, le « jumeau numérique » pour la conception, le pilotage et l'expérimentation des systèmes automatisés, et l'intégration robotique industrielle et collaborative.