

## Topic 4 : Advanced Computing



**Dr. Abdelfattah AMAMRA**

Dr. Amamra is an assistant professor in the Computer Science Department at California State Polytechnic University, Pomona. He received his doctorate degree from the University of Quebec, School of Higher Technology, Montreal, Canada. His master's degree in computer engineering was from Concordia University, Montreal, Canada. He holds a Computer Engineer degree from INELEC. Dr. Amamra has more than 20 years' experience in IT and Computer Science. He has teaching and research experience at several institutes including University of Quebec (School of Higher Technology), University of Montreal (School of Polytechnique of Montreal), University of Connecticut, and California State Polytechnic University, Pomona. His research interests include smartphone security, network security, IoT security, and using machine learning to solve security problems. He has published papers in high-quality journals and conferences. His teaching expertise at the graduate and undergraduate levels is in the area of computer network, network security and cryptography, machine learning and computer architecture and design.



**Dr. FatimaZohra BENHAMIDA**

Fatima assistant professor in computer science with three years experience in industry and over a decade in both scientific research and higher education sectors. She earned an Engineer degree (2006), a post-graduate diploma (2009), and then a PhD (2015) in Computer Science from the Higher National School of Computer Science, Algiers (ESI); where she is working now as an Assistant Professor. Her research interests include topics related to wireless sensor networks, Internet of Things, and delay communication reliability. The studies of these topics help to solve socio-economic challenges as for eHealth and smart environments (agriculture, urban traffic, city, etc.). In addition to her areas of expertise, Fatima has participated in many international projects within multidisciplinary teams. Projects were related, but not limited, to multi-agent systems for water monitoring (France), smart vehicular area network architecture (Tunisia), high performance code optimization (MIT, USA), security in fog computing (Algeria), and supply chain prediction using Machine Learning models (Norway). As a researcher, she is involved in several international collaborations because of her various movements as a visiting professor in universities such as UTC (France), DeustoTech (Spain), and SJSU (California USA).

With great commitment and professionalism, Fatima has been crowned by many rewards (Best thesis paper award, Finalist at best thesis competition, PhD & Post-doctoral fellowships...). She has also represented Algeria in many worldwide programs, such as Techwomen 2017 which selected 100 women over 4000 applicants for a 5-weeks fellowship in Scilicon Valley, or Microsoft Ignite 2018,2019 the busiest event open to the public.



**Ouafa BENTERKI**

Ouafa is the CEO & Founder of MTY Intelligent Software the First AI Women led Startup. She is the first Algerian, Arab and African awarded the title of Microsoft Regional Director.

Ouafa graduated in computer science from the university of science and technology Houari Boumedienne. She worked as IT Professional in many public and International firms and organizations, moving from System engineer to IT Analyst developer in Halliburton Energy Services, to IT manager in a public company, then IT Manager in the United nations High Commissioner for Refugees.

After a career of 10 years, she decided to pursue her studies in Computational linguistics She obtained a Master in Translation Technology, AI dedicated to language processing, in 2011.and considered as a Pioneer in Machine -Translation in Algeria Since then.

In 2012 Ouafa was Named Techwoman emerging leader in technology by the Techwomen Program , organized by the US department of State for Women leaders in Technology in Silicon valley and implemented by the International Institute of Education(IIE),this was an opportunity to attend a professional internship in Adobe in the Machine Translation department.

In August ,2016 Ouafa was Selected by the African Union as Algeria delegate in Tokyo international Conference for Africa development ( TICAD) in Kenya , and then named member of the African Women Experts committee for African Women Social and Economic development.

In 2016, MTY Intelligent Software , the Startup Founded by Ouafa and her partner Won the VIATIC 2 contest for the most innovative research based Algerian Startups.

In 2017 she contributed as a Member of the Algerian Smart city Team who conducted the Study allowing Algiers to become a Smart city and organize the first Smart cities Summit in Algiers in 2018.

Chair of the Arab Women in Computing Algerian Chapter . Since July 2018

Chair of the Techwomen-TechGirls Alumni Chapter in Algeria Since 2019.

President of the Machine Translation Association - Algeria. Since 2015 - Public Speaker : Microsoft Ignite, Orlando Florida ( September 2018- November

2019), Smart city Summit in Algiers 2018 , International Conference on Children in Conflict Zones – Istanbul Turkey 2018, Cherie Blair Program - Women In Technology Conference - England 2017 , International language conference in Dubai UAE 2016, Arab Women in Computing conferences (Algiers Algeria 2016 - Abu Dhabi 2013 – UAE)..



### Dr. Mourad BOUACHE

Dr.Mourad Bouache is now working at The Verizon Performance Engineering and BigML Group. PEG-ML is responsible for determining the configuration of servers and when to adopt new technology and Artificial Intelligence in their world class data-centers.

Mourad has a PhD (2010) from the University of Perpignan Via Domitia in France in Computer Architecture. His Masters degree in Micro-architecture was from the University of Boumerdes (Algeria) with a co-direction with the University of Perpignan, France (2006). He received his Bachelor degree in Software Engineering and Computer Science.

He started a Postdoctoral Research in Real-Time Embedded Software Group in 2012 at the Department of Electrical and Computer Engineering - University of Waterloo (Canada). Before joining the University of Waterloo he has been a Postdoctoral fellow at the University of Perpignan Via Domitia in France. He was also a Postdoctoral researcher at the University of Illinois Champaign-Urbana, UIUC.

He started working at Yahoo in Silicon Valley in July 2012, Oath in 2016 and Verizon Media in 2019 as a Performance Engineering and BigML Manager for Yahoo Data Centers, Hardware and Software Optimization.



### Dr. Mourad CHERFAOUI

Dr. Mourad Cherfaoui's experience spans more than 20 years in computer science. He has worked in various companies in hi-tech in Canada and the USA, like Ericsson, Cisco and Intel. He has held roles in software development, design and architecture. His focus is distributed systems and computer security.

In his current role at Intel, he defines the architecture of a software that enables and manages Intel hardware security features in large data centers.

Dr. Mourad Cherfaoui occasionally teaches university classes in security and cloud computing.

Dr. Mourad Cherfaoui has a PhD and a Masters degree (DEA) in computer science from the university of Rennes, France. He also holds a computer science engineer degree from USTHB, Algeria.



### Dr. Zakarya DRIAS

Dr. Zakarya DRIAS is leading the Cybersecurity R&D in Schneider Electric. His main focus and expertise is on the protection of critical infrastructures and cyber-physical systems. He also contributes to international standards buddies like IEC, IETF and OpenGroup.

In his role, he is responsible for defining the strategy and architecture of technologies that protect Industrial control systems.

Zakarya has a PhD in Cybersecurity from Telecom ParisTech in France, masters degree in networking and security from Sorbonne Universities (UPMC-ParisVI) and a Computer system engineer degree from

ESI ( Ex:INI )Algeria.

After 5 years in France as a cybersecurity architect and researcher, he moved to the US (Boston) to lead the R&D Cybersecurity Program for the Process Automation division in Schneider electric.



### **Reda GUERMAS**

For more than twenty years, Reda Guermas worked in the field of enterprise class business software development and management projects.

Projects include Ad Technology (Ad servers, RTB, Ad tags, Targeting), Financial Services, Internet Collaboration, Systems Monitoring and Telecommunication.

Results oriented and problem solver, Reda Guermas takes an idea and turns it into a reality.

Reda's effective leadership, focus and entrepreneurship skills has helped many companies move from the concept stage to development and growth.

Reda Guermas holds a Masters degree in Computer Science. He has also received several certifications in the technical field as well as in management from the American Management Association (AMA).



### **Dr. Mounir HAHAD**

Dr. Mounir Hahad is a seasoned cybersecurity expert focused on malware research, detection techniques and threat intelligence. He is Head of Juniper Threat Labs at Juniper Networks, the organization at Juniper Networks identifying and tracking malicious threats in the wild and ensuring Juniper products implement effective detection techniques and have access to the latest threat intelligence needed to block malicious attacks. Prior to joining Juniper, Mounir was in a similar role as the Director of Cyphort Labs and has held various leadership roles with Cisco Systems Security Technology Group and IronPort Systems. Dr Hahad holds a Doctorate degree from University of Rennes and an Engineer degree from Universite des Sciences et de la Technologie Houari Boumediene (USTHB).



### **Abderrezak KAMEL**

Abderrezak Kamel is an experienced advertising technology executive responsible for spearheading Demandbase's unique audience targeting technology and Demand-Side Platform (DSP). Abderrezak brings more than two decades of experience in Online Advertising, Information Retrieval and Natural Language Processing. For the past 7 years prior to Demandbase, he was CTO at Technorati Media where he built their meta SSP (Supply side Platform) and yield optimization technology. Previously as CTO of Lucidmedia, he directed the development of one of the first DSP and contextual analysis offerings in the industry.

Prior to LucidMedia, Abderrezak held development leadership roles in the Enterprise Search and Text Mining at Autonomy, Verity and Semio corp, where he built document categorization, entity extraction and sentiment analysis products.

Abderrezak Kamel was a Computational Semantics PhD student at Leonardo da Vinci University, France. He earned his DEA in Artificial Intelligence at the University of Montpellier, France. And an Engineer degree in Computer Science from Universite des Sciences et de la Technologie Houari Boumediene (USTHB).



### **Dr. Benaoumeur Mohamed SENOUCI**

Benaoumeur Senouci received the master's and Ph.D degrees in computer engineering from the National Polytechnic Institute of Grenoble-TIMA Laboratory (France).

Currently he is working as Associate Professor in the Graduate Engineering School ECE-Paris within the INSEEC-U Research Center. Before, he was working as a research fellow in the University of Twente (The Netherlands). He worked also as research fellow in several French research laboratories and institutes (CEA-LAMIH Lab, LE2I-Lab University of Burgundy, ELIAUS-Lab University of Perpignan). He was an Invited Professor within the Kyungpook National University, South Korea. His main research topics are: AI for CPS (Cyber Physical Systems), Smart Embedded Systems Design, Embedded HW/SW

Deep Learning, Multi-CPU/FPGA platform based co-design, smart/autonomous vehicles applications; dependability/reliability of embedded systems, vision based smart cameras.



**Dr. Khaled YAGOUB**

Dr. Khaled Yagoub has 20 years' experience in Computer Science and software development with a focus on database performance monitoring and tuning.

Dr. Khaled Yagoub was a software architect at Oracle America where he worked for 17 years on the design and implementation of key database products such as automatic SQL tuning advisor, real-time SQL monitoring, SQL performance analyzer, and manageability of multi-tenant and autonomous database.

Recently he moved to work for Snowflake Computing, a cloud data platform startup, seeking a new and more challenging career opportunity.

Khaled Yagoub holds a PhD degree in Computer Science from INRIA and the University of Versailles Saint-Quentin-en-Yvelines, a master's degree in Artificial Intelligence from the University of Paris XIII, France, and an Engineer degree from the University of Es-Senia, Oran, Algeria.

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