

PERSONAL INFORMATION

Bilal Nakhal

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Sex Male | Date of birth 22/01/1985 | Nationality Lebanese



WORK EXPERIENCE

Oct-2021 to Present

Assistant Professor at Mathematics and Computer Science Department Beirut Arab University (Lebanon)

- Teaching various Computer Science core courses at all levels
- Major contributor in applying and preparing the ABET accreditation requirements
- Acting as a leader or contributor in several academic committees in the department
- Acting as a co-advisor for Computer Science PhD candidates
- Supervising Senior and Thesis projects for BS and MS Computer Science students
- Attending all internal and external meetings identified by the upper management and faculty board
- Working on various research fields with colleagues and students

Jan-2019 to Sep-2021

Acting Dean of Faculty of Sciences & Fine Arts Arts, Sciences and Technology University in Lebanon (Lebanon)

- Leading and coordinating strategic planning and curriculum development at the faculty
- Providing the faculty with its divisions with academic leadership to encourage excellence in executing the academic programs and research work
- Continuously planning and developing academic programs to ensure meaningful academic outcomes with intended high quality
- Managing activities at the faculty level within the framework of the university's strategic plan by effectively using available resources
- Supporting heads of departments in the faculty and holding them accountable for the proper discharge of their departmental responsibilities
- Assisting in the development of a compelling and inclusive vision for research

Jan-2012 to Sep-2021

Chairperson/Coordinator of Computer Science Department Assistant Professor at Computer Science Department Arts, Sciences and Technology University in Lebanon (Lebanon)

- Leading and managing the Computer Science department
- Teaching Computer Science major courses and labs (12 courses per year)
- Ensuring high quality of teaching in the department
- Continually developing the curriculum and offered courses
- Ensuring that teaching, curriculum and student outcomes are in line with high international standards
- Participating in and carrying out any administrative and organisational tasks as necessary
- Attending all internal and external meetings identified by the upper management and faculty board
- Studying and processing academic profiles and petitions of students in all branches
- Supervising Senior projects and Thesis projects for Computer Science students

- 2007–2012 **Senior Web Developer**
Cyberbase Digital, Beirut (Lebanon)
- Building websites using XHTML, JavaScript, JQuery, XML, PHP and SQL
- Hosting and managing VPS servers
- Troubleshooting and support

EDUCATION AND TRAINING

- 2014–2017 **Ph.D. in Computer Science - Virtual Reality**
Docteur de l'Université de Bretagne Occidentale
École Nationale d'Ingénieurs de Brest – ENIB/CERV/LABSTICC, Brest (France)
Thesis: Generation of Communicative Intentions for Virtual Agents in an Intelligent Virtual Environment
- 2006–2009 **Master of Science in Computer Science & Communication**
Arts, Sciences and Technology University in Lebanon, Beirut (Lebanon)
Thesis: Meta-search Engine and Data Web-housing including the Challenging Technologies and Performance Tuning Techniques
- 2002–2005 **Bachelor of Science in Computer Sciences**
Arts, Sciences and Technology University in Lebanon, Beirut (Lebanon)

ADDITIONAL INFORMATION

- Publications**
- Intelligent Embodied Conversational Agents in Virtual Environments
B. Nakhal, E. Bevacqua, B. Said and R. Querrec
21st International Science Conference (LAAS21), Beirut, Lebanon, April, 2015
 - Intelligent Embodied Conversational Agents in Virtual Environments for Learning
B. Nakhal, E. Bevacqua, B. Said and R. Querrec
22nd International Scientific Conference of LAAS (LAAS22), Beirut, Lebanon, April, 2016
 - Cognitive Architecture for Embodied Conversational Agent: Application on Virtual Learning Environment
B. Nakhal, E. Bevacqua, B. Said and R. Querrec
8th International Conference on Education and New Learning Technologies (EduLearn16), Barcelona, Spain, July, 2016
 - A Design Proposition for Interactive Virtual Tutors in an Informed Environment
J. Taoum, B. Nakhal, E. Bevacqua and R. Querrec
16th International Conference on Intelligent Virtual Agents, Los Angeles (IVA'16), California, USA, September, 2016
 - Cognitive Embodied Conversational Agents in Virtual Learning Environment
B. Nakhal and R. Querrec
IEEE/29th International Conference on Microelectronics (ICM17), Beirut, Lebanon, December 2017
 - Model for Verbal Interaction between an Embodied Tutor and a Learner in Virtual Environments
R. Querrec, J. Taoum, B. Nakhal and E. Bevacqua
18th ACM International Conference on Intelligent Virtual Agents, November 5-8 2018, Sydney, Australia

Projects **Web and Mobile Development:**

- Developing many projects and their Content Management Systems using Software Engineering documentation resources, HTML5, CSS, JavaScript, PHP and MySQL, with JQuery, AJAX, JSON and bilingual abilities
- Supervising projects that are built with UML modelling tools, HTML5, CSS, JavaScript, PHP, MySQL, ReactJS, React Native, NodeJS, Django Python, MongoDB, Flutter, Firebase, WordPress
- Hosting and Web Mastering websites

Virtual Reality and Augmented Reality:

- Generation of Communicative Intentions for Virtual Agents in an Intelligent Virtual Environment: Virtual Reality, Artificial Intelligence, Embodied Conversational Agents, Intelligent Virtual Environment, Vocal and Textual Communication Skills
- Immersive Marketing Virtual Touring:
Virtual tour application that can immerse and interact with users in a realistic virtual environment through several visual and interactive tools including augmented reality Head Mounted Displays
- Augmented Reality in Education:
Smart application that aims to minimize the contents of books, integrate various rich resources (images, videos, 3D objects, interactive capabilities...), gather all resources through a mobile application that runs on various mobile platforms (Android and iOS) with user friendly interface for students at all levels and ages

JAVA:

- Supervising Object-Oriented projects that are built using JavaFX and MySQL, such as Ticketing System, Bank System, University Management System

Supervising and reviewing various Thesis Projects on the following topics:

- Virtual and Augmented Reality smart tools and games
- Internet of Things
- Big Data and Data Science
- Distributed systems JAVA applications

PERSONAL SKILLS

Mother tongue(s) English, Arabic

Job-related skills

- **Programming and Database Courses and Labs:** Object-Oriented Programming concepts, Algorithms, Pseudo-code, Flowcharts, UML modelling, JAVA, C, C++, C#, HTML5, XHTML, JavaScript, ReactJS, CSS3, PHP, SQL
- **Virtual Reality and Augmented Reality projects and technologies:** Unity3d projects, Meta-modelling Systems, NAO, Oculus, HTC VIVE, CAVE
- **Web Development:** Hosting websites developed using HTML5, XHTML, CSS3, JavaScript, ReactJS, Django Python, JQuery, XML, PHP and SQL Databases
- **Online Tutoring, Administrating and Managing work:** Instructing live-courses through various Virtual Learning Environments with interactive pedagogical techniques, using: Microsoft Teams, Google Classroom, Google Meet, Google Sheets and Forms, ZOOM, Moodle, Linear, Discord, Figma, MIRO...)