

Bassem SEDDIK

Date and place of birth: 24-10-1983, Bizerte, Tunisia

Actual profession: University assistant professor

Total professional experience: 15 years

Courses: [Website](#) and [Youtube-channel](#)

Email: bassem.seddik@gmail.com

Mobile phone N°: +21699957567

Driving License type: B

Address: 165 Tokyo Street, 6023

riadh5 - Sousse – 4023, Tunisia

Skype: bassem.seddik

Social situation: Married, 2 kids



Profile:

- Specialized in teaching 2D/3D graphics programming with application to games creation on Unity game engine,
- Researcher in computer vision, machine learning and signal/image processing.
- Solid foundations in Web/mobile programming including Android/Hybrid, PHP/Symfony, JS/TS, etc.
- Very-good artistic, social, pedagogic and teamwork capabilities

Studies:

Period	Study Level	Institutions
Feb. 2011 to May 2017	Ph.D. in computer vision and machine learning Subject : "Multimodal recognition of human-action streams: Application to sign language recognition" (Best contribution video presentation) (Ph.D. manuscript)	National Engineering School of Sfax (ENIS), Tunisia
Sept. 2006 to Jan. 2009	Research Masters Subject: "Old documents image processing" (Master's manuscript)	Superior Institute in Applied Science and Technology of Sousse (ISSATSo), Tunisia
Sept. 2002 to Jun. 2006	Bachelor: 4 years specialization in information technology End-of-studies project : "3D scenes rendering improvement using OpenGL" (Project manuscript)	ISSATSo, Tunisia
Sept. 1998 to Jun. 2002	Collegial studies : Specialization in mathematics (Tunisian Baccalauréat)	Abdel Aziz Elbahi college, Sousse, Tunisia

Professional experience and projects. Most relevant to the job offer are colored:

Period	Realized work	Organizations
12 hours - August 2020	A professional training delivered on 2D/3D games programming on Unity: 2D assets creation and UI programming, then their equivalent in 3D: Application to a roller game	Team Coworking space, Sousse, Tunisia
24 hours- June 2020	A professional training delivered on JavaScript/TypeScript programming: Online teaching of the SOPRA STEREA company employees on the JS and TS languages	ORSYS Formation, France
September 2018 to January 2020	Participation to the mounting of 2 national projects <ul style="list-style-type: none"> • A national project for SMART University establishment with a total of 700M Dinars allocated budget • A national joint research project on human operators working actions assessment in the textile industry Participation to the mounting of 2 international projects <ul style="list-style-type: none"> • An H2020 project on collaborative Robots • An Erasmus+ capacity building project on Smart University 	ISET Sousse (JUST ACCEPTED) A set of 5 national research laboratories National Engineering School of Sousse (ENISo), Tunisia ISET Sousse
Jan. 2011 to May 2017	Thesis work: <ul style="list-style-type: none"> • Develop a multimodal solution for the recognition of human actions • Recognize the sign language actions • Propose a robust implementation of offering higher speed than the comparative literature methods • Develop using the C/C++, C#, OpenCV, python, Matlab, and Visual Studio under both Windows and Linux 	LATIS laboratory, ENISo, Sousse, Tunisia (Laboratory website)

Jul.-Aug. 2015	A collaboration Project with a Mechanics specialized Lab.: <ul style="list-style-type: none"> Calibrate and control a Kuka robot to draw the captured human faces on a white board Program graphically using the "GrassHopper" toolkit on "Rhino 3D" software to control the robot (PPT) 	LATIS research lab. (ours) & LMS, ENISo, Sousse, Tunisia
From Sep. 2014 to Sep. 2017	Website administrator of ISET Kairouan : <ul style="list-style-type: none"> Establish of the CMS Joomla template Write articles, update components (Website) Develop a PHP/MySQL-bases application (Video) 	ISET Kairouan, Tunisia
Jan. to Apr. 2012	Professional R&D collaboration : Visual recognition of specific 2D-barcode called "DmatCode" <ul style="list-style-type: none"> Program in C++ and OpenCV under Visual Studio 2010 a functional prototype of the application Assist an engineer in its implementation using the Objective C language for an iPhone version Produce a complete documentation report (Report) 	NaoSecurity French company localized in Sousse, Tunisia
September 2011	Professional collaboration : Design of the TEC1 Electric car : <ul style="list-style-type: none"> Draw the 2D concept art, Design the complete 3D models for the inside and the outside of the TEC1 car Produce a demonstrative 3D animation (Video) 	Private university of Sousse, Tunisia
Feb. to Jun. 2007	Secondary school tabularization project: <ul style="list-style-type: none"> Create an interactive CD on the C++ language Divide the contents into 9 chapters to an evaluation QUIZ Write a synthesis report (Videos) (Report) 	Regional education direction of the Kef, Tunisia
Feb. to Jun. 2006	Graduation project (4 years) studies: <ul style="list-style-type: none"> Make an application to load 3D *.obj files and apply different smoothing algorithms Program in C++ with OpenGL and MFC (Project) 	ISSAT Sousse, Tunisia
Déc. 2005 to Oct. 2006	Work as a 2D / 3D graphic designer <ul style="list-style-type: none"> Sketch drawing, 2D graphics creation, Model and animate in 3D for production Master 3Ds Max and Photoshop (Proof) 	2D/3D production studio Zaytoon Prod. Sousse, Tunisia

Certifications et Badges by relevance to the job offer:

1	Fully Followed the Unity certified 3D artist specialization in coursera	Sep-June 2020
2	<u>Stanford Machine learning</u> course by Andrew Ng (Coursera online certificate)	March 2014
3	<u>Certification IELTS academic</u> in English: Average Score 7.5/9 (Good user proof)	January 2009
4	<u>Certification Linux LPI Level I: LPI 101 + LPI 102</u> (Link)	March 2011
5	Certification 98-375 MTA: HTML5 Application Development Fundamentals (link, pwd B75F-s23L)	June 2018
6	Badge ALECSO Web Apps (Link, pwd 2ryvdqg0_2)	January 2018
7	Online Trainer Badges: "Teaching with Moodle" and "Planning Your Course" from the Virtual University of Tunisia (Cycle 3 Badge) (Cycle 5 Badge)	March-April 2017

International research stays :

Period	Work made	Organization
July 2013	21 days: Study of the application market for thesis work. The internship allowed to: <ul style="list-style-type: none"> Orient the thesis work towards sign language Create a prototype application in Unity/C# dedicated to gesture recognition from Kinect (Videos) 	Marketing department of Polytech de Nantes, France
January 2013	30 days: Focus on the shape-context descriptors for computer vision. The internship allowed to: <ul style="list-style-type: none"> Compile C++ sources under Windows and Linux for various descriptor extraction tools Compare their performances (Invitation) 	Excellence Laboratory of Blaise Pascal de Clermont-Ferrand university, France

Teaching experience:

Period	Teachings	Institutions
Since Sep. 2010 till now	Teaching for master's degree in cloud computing: <ul style="list-style-type: none"> GPU-based shared memory machines programming with CUDA Parallel CPU-based computing with OpenMP Teaching for applied license in information technology: <ul style="list-style-type: none"> I offer students the theoretical foundations in multimedia in addition to information systems modeling (UML) I specialize students in 2D/3D design and programming I teach students how to program in C/C++, Android/Java, C#, PHP/Symfony/MySQL, HTML/CSS and JavaScript. I make them familiar with software such as: Photoshop, Illustrator, Premiere, After Effects, Audition, Blender 3D, Maya et Unity. <p>(My YouTube channel) (My Moodle (Key: ISETSousse))</p>	From Sep. 2017: Higher Institute of Technology of Sousse (ISET Sousse), Tunisia Before: Higher Institute of Technology of Kairouan (ISET Kairouan), Tunisia
2 nd semester of 2014/15	Teaching students in master's degree "Infographics and Industrial Applications" <ul style="list-style-type: none"> Advanced theoretical foundations of infographics 3D design for industry 	ISSAT Kairouan, Tunisia
1 st semesters of 2013/14 and 2014/15	Teaching the ENISO engineers the practical workshops of "Computer Vision" (Workshops website)	ENISO, Tunisia
2 nd semester of 2009/10	Teaching the ENISO engineers the practical workshops of "J2EE-based Persistence Applications"	ENISO, Tunisia
Univ. years 2008 to 2010	Teaching for License students the lessons and practical workshops of "Operating systems and Linux Bash programming"	ISIK Kef, Tunisia
Scholar years 2006 to 2010	Teaching secondary-school students during 4 years Basic skills in information technology	Regional education direction of the Kef, Tunisia

Selection of End-of-Studies projects proposed and tutored for students:

Type	Period	Title and description	Contributions
Video gaming	Univ. year 2017	Free Tounsi : A 3D Runner Game made with Unity 3D and controlled via Kinect (Report of the game)	<ul style="list-style-type: none"> Sketch drawing, Scripting, 3D modeling, texturing, 3D animation, Rendering, Selection of musical resources and Prefabs, Sound recording, Music production, Video montage, Programming.
	Univ. year 2016	Echo in the Darkness : 2D Game with Unity 2D inspired from the "Limbo" game (Game report)	
3D short films	Univ. year 2016	Enterprise SisPay : Publicity Spot made with Blender 3D entitled "Together we can attain Excellence" (Video)	
	Univ. year 2013	Voie de l'inconnu : Short 3D film 3D concerning the Tunisian revolution (Video)	
3D navigation applications	Univ. year 2014	Augmented Reality visit to ISET Kairouan : using Vuforia plugin and Unity	
	Univ. year 2011	3D Navigation in the monuments of the city of Kairouan : Usage of the Virtools software	

Within-company stays and visits:

Period	Realized tasks	Organizations
May 2015	Industrial visit: <ul style="list-style-type: none"> Visit with the ISET students from Kairouan the Tunisian leader in 3D production CGS3D subcontractor of the Disney Channel series Visit the studios of the First TV channel: Green rooms, equipment, production, editing, archives, etc. Visit the Audiovisual Training School INA (Images) 	Multiple audiovisual production companies in Tunis, Tunisia http://www.cgs3d.com
May 2011	Industrial visit to the FAN 3D days in Nabeul: <ul style="list-style-type: none"> Participate with the students of the EIT of Kairouan by a stand of presentation for our productions Attend the workshops provided by professionals in video games and 3D production 	NetInfo 3D Training School, Nabeul, Tunisia

	<ul style="list-style-type: none"> Discovered the Unity game engine 	
July 2006	Masters research stay : <ul style="list-style-type: none"> Segment and rebuild 3D body members from MRI cuts Compile C ++ codes with VTK and QT libraries for medical applications 	TIM laboratory of the university. of medicine of Monastir, Tunisia
July 2004	Studies in-company productive internship : <ul style="list-style-type: none"> Maintenance and analysis of the digital resources for the Tunisian Post Maintain and manage the IT services related to the local and distant networks of the Tunisian Post Document and create graphs (Attestation) 	Information Pole of the Sousse Postal Office, Tunisia
Jun. and Jul. 2003	Studies in-company initial internship : Realization of CD-ROMs and interactive websites <ul style="list-style-type: none"> Exploit and master the production tools Photoshop, Flash, Dreamweaver, Director and FrootyLoops Develop for the Web in PHP / MySQL, HTML, CSS, and JavaScript 	ES2i Computer Company, Sousse, Tunisia

Languages :

	Spoken	Written	Read	Heard
English	<i>Good</i>	<i>Very Good</i>	<i>Very Good</i>	<i>Very Good</i>
French	<i>Very Good</i>	<i>Very Good</i>	<i>Very Good</i>	<i>Very Good</i>
Arabic (native)	<i>Very Good</i>	<i>Very Good</i>	<i>Very Good</i>	<i>Very Good</i>
Italian	<i>Good</i>	<i>Average</i>	<i>Average</i>	<i>Good</i>

Scientific productions, communications et competitions:

Resume: Productions are: 1 impacted article, 3 book chapters, 8 international conferences and 2 national ones.

Contributions without publications include: The participation to 3 competitions, one doctoral school in addition to participating to the organization of 2 international scientific manifestations.

[\(Google Scholar\)](#) [\(Research Gate\)](#)

Conference/publication	Contribution	Ranking
Springer Books	June 2019: Bassem Seddik and Najoua Essoukri Ben Amara: “Visual Methods for Sign Language Recognition: A Modality-Based Review”	Book chapter
Journal IET computer Vision	Impacted article in April 2017 : Bassem Seddik , Sami Gazzah, Najoua Essoukri Ben Amara: “Human action recognition using a multi-layered fusion scheme of Kinect Modalities”	I.F. 1,78
Conf. Int. ICIAR 2017, Montréal, Canada	Book chapter after conference oral communication : Bassem Seddik , Sami Gazzah, Najoua Essoukri Ben Amara: “Hybrid Multi-modal Fusion for Human Action Recognition”	Class C Book Chap.
Conf. Int. ICIAP 2015, Genova, Italy	Book chapter after a conference poster: Bassem Seddik , Sami Gazzah, Najoua Essoukri Ben Amara: “Modalities Combination for Italian Sign Language Extraction and Recognition”	Class B Book Chap.
Conf. Int. EUSIPCO 2015, Nice, France	Participation et présentation d’une communication orale : Bassem Seddik , Sami Gazzah, Najoua Essoukri Ben Amara: “Hands, Face and Joints for Multi-modal Human-Action Temporal Segmentation and Recognition”	Class B
Conf. Int. IPTA 2015, Orléan, France	Poster participation : Jassem Mansouri, Bassem Seddik , Sami Gazzah, Thierry Chateau: “Coarse Localization Using Space-Time and Semantic-Context Representations of Geo-referenced Video Sequences”	IEEE International
Conf. Int. IPAS 2014, Hammamet, Tunisia	Participation and oral presentation : Bassem Seddik , Sami Gazzah, Thierry Chateau, Najoua Essoukri Ben Amara: “Augmented Skeletal Joints for Temporal Segmentation of Sign Language Actions”	IEEE International
Conf. Int. SSD 2013, Hammamet, Tunisia	Participation, reviewing and oral presentation: Bassem Seddik , Houda Mâamatou, Sami Gazzah, Thierry Chateau, Najoua Essoukri Ben Amara: “Unsupervised Facial Expressions Recognition and Avatar Reconstruction from Kinect”	IEEE International
Competition Int.: 3 Minutes Thesis, Nice, France 2015	Participation with a short paper and a 3-minutes communication: Bassem Seddik : “Sign Language Recognition and Translation” (3 ^{ème} position)	International
Workshop IMOBS3, 2014 Visio-conference à Sousse	Participation to the workshop organization: (Website)	International
Conf. Int. CIFED 2008, France	Participation with a poster paper:	International

Hela Boulehmi, Bassem Seddik , Anis Kricha, Najoua Essoukri Ben Amara : <i>"Prétraitement de documents anciens"</i>		
Conf. Int. AMINA 2008, Monastir–Tunisia	Participation and oral presentation: Bassem Seddik , Hela Boulehmi, Najoua Essoukri Ben Amara : <i>"Caractérisation d'images issues de documents anciens"</i>	International
Conf. Int. MELECON 2012, Hammamet, Tunisia	Animation of a stand-point relative to the "IEEE ENISO SB"	IEEE International
Conf. Nationale TJASSST 2011, Hammamet, Tunisia	Participation and oral presentation: Bassem Seddik , Chedlia Ben Kraiem, Sami Gazzah, Najoua Essoukri Ben Amara: <i>"Tracking of Human Body Parts in a Monocular Video Sequence"</i>	International
Journée Tunisienne de Rech. en Informatique, 2017	Participation with a poster summarizing the research work (Poster)	National
National conf. JWMU 2015, Djerba, Tunisia	Oral presentation of a developed application for ISET Kairouan Bassem Seddik : <i>"Application de gestion de la scolarité d'ISET Kairouan"</i> (Video)	National
Doctoral school CITA 2014, Gammart, Tunisia	Participation and poster presentation (Poster)	-
National competition Ma thèse en 180 sec., Kairouan, Tunisia	Oral communication: Bassem Seddik , Sami Gazzah, Najoua Essoukri Ben Amara: <i>"Reconnaissance et Translation de la langue des Signes"</i> (Winner of the public choice) (Attestation)	-
Competition Int. IEEE Xtreme, édition 8, 2014	Organize and participate to the IEEE-Xtreme-8 24 hours programming competition at the ENISO engineering school Ranked 25/100 nationally and 1255/2300 internationally (Video)	-
Doctoriales de l'université de Manouba, Tunisia, 2013	Propose a durable development project for the region of Manouba : Bassem Seddik et al. : <i>"Vers le rapprochement de la recherche scientifique de son environnement socio-économique"</i> (Wining team) (Attestation)	-

Trainings relative to the job offer:

Period	Subject
March 2012	Training in communication techniques by the German group "Invensity"
January 2012	Training on the OpenCV library by the SETIT research group in Sfax
Sep. 2006 to Jun. 2010	Several weekly trainings for high school and secondary school teachers

Manifestations and thematic days organized:

Period	Subject
Sep. 2015 to Jun. 2017	Teacher in charge of the Microsoft club of ISET Kairouan: <ul style="list-style-type: none"> Training in the creation and animation of "low poly" models for video games (Youtube) Introduction to C # programming and web services under .Net (Facebook page)
Every December from 2011 to 2016	Prepare and animate booths at the ENISO Business Convergence Forum (FCEE): Booths of the IEEE-SB association and booths of the LATIS laboratory (formerly SAGE research unit) (Facebook page)
May 2014	ISET Kairouan Industry Open Day: <ul style="list-style-type: none"> Chair the organization of the IMTEC 2014 event Organize the competition of the best PFE of ISET Kairouan Partner: United Nations Industrial Development Organization (ONUUDI) (Website)
2011 à 2013	Founding member of the Free Software Promotion Club (CPULL) of ISET Kairouan: <ul style="list-style-type: none"> Days of open-source software promotion Day in collaboration with TUNADROID and Yasmine Martket (Facebook page)

Associative implication and interests:

Period	Subject
From 2012 to 2015	Member of the Scientific and Technological Association of ISET Kairouan, Tunisia
From 2010 to 2013	Founding member, then <i>Chair</i> of the <i>IEEE ENISO Student Branch</i> (ENISO SB)
Univ. year 2011/12	<i>AIIESEC</i> association membership
Personal interests	Hand drawing and numeric art, basket-ball, music and hand-made gadgets.