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| PERSONAL INFORMATION | Ghassan Nihad Jawad |
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|  ghassan.n.jawad@ieee.org |
| Sex Male | Date of birth 05/01/1984 | Nationality Iraqi  |

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| WORK EXPERIENCE |   |

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| June 2016 – June 2017 | Research Associate on Microwave Non-Destructive Testing (NDT) |
| The University of Manchester, UK |
| * I was responsible of the technology transfer for a newly-developed material testing and inspection technique using microwaves. My job involved performing millimetre-wave measurements using Keysight’s various types of Vector Network Analysers (VNAs) as well as data extraction and analysis using Matlab, Python and C#.
* By working closely with Sonomatic Ltd., one of the major inspection companies in the UK, I have made theoretical microwave techniques viable for many scanning jobs for various clients in the UK and abroad.
* My work has recently resulted in an optimised method to inspect hidden air gaps in oil pipe wrappers using advanced microwave and signal processing techniques for the first time.
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| Business or sector Research, Material Inspection  |
| Sep. 2013 – Sep. 2016 | Teaching Assistant and Tutor |
| The University of Manchester, UK |
| * As a Tutor, I was responsible of providing the students of the pre-undergraduate foundation program with an insight into some of the basic physics principles. My three years’ experience in this job was rewarded with many positive feedbacks from the students in my groups.
* I also worked as a Teaching Assistant in many undergraduate and postgraduate laboratories. I was responsible of interacting with the students whilst they conduct their experiments. I have also organised the marking schemes for their lab. reports.
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| Business or sector Education  |
| Sep. 2005 – Jan. 2013 | Assistant Lecturer  |
| Baghdad University, Iraq |
| * For four years, I taught different subjects such as C++ programming for the Second year, and Microwave Engineering for the Fourth year. I have changed the curriculum of both subjects and enhanced them each year in terms of theoretical lectures and hands-on laboratory experiments. These curricula are still being taught till now in the same department.
* I have also been the Department Administrator. This role involves monitoring the students’ attendance, the undergraduate curricula and timetabling.
* During my work at Baghdad University, I have supervised many Fourth year graduation projects. Despite the limited resources, all of these projects involved practical hardware based work. Most of the students I have supervised are now holding high profile engineering jobs inside and out of Iraq.
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| Business or sector Education  |

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| June 2006 – June 2009 | Network Switching Engineer |
| Zain Mobile Telecommunication, Iraq |
| * As a member of the Operation and Maintenance (O&M) team, my duties included constant supervision of the Mobile Network Switching System (NSS) besides maintaining and updating it when necessary. During my work at Zain, my team and I were up to the challenge of maintaining the reliability of the mobile network during the civil unrest in Iraq between 2006 and 2007.
* While working on Alcatel-Lucent and Nokia-Siemens mobile switches, I have developed scripts used for automatic monitoring and updating the switch. I also developed a code for extracting provisional data from the daily log extracted from the switches, which highly facilitated my team’s daily tasks.
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| Business or sector Telecommunication |

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|  EDUCATION AND TRAINING |   |

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| Jan. 2013 – Oct. 2016 | Doctor of Philosophy |  |
| The University of Manchester, Manchester, UK. |
| Thesis Title: “Exploitation of Gyroelectric Behaviour in Designing Millimetre -Wave Nonreciprocal Microwave Devices”. Supervisor: Prof. Robin Sloan |
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| Sept. 2005 – March 2009 | Master of Science |  |
|  | Baghdad University, Baghdad, Iraq |  |
|  | Dissertation Title: “A Hybrid Nonlinear Decision based Equaliser”. Supervisor: Dr. Sarcout N. Abdullah. |  |
| Sept. 2001 – July 2005 | Bachelor of Science |  |
|  | Baghdad University, Baghdad, Iraq |  |
|  | (Ranked the first out of 55 students)4th Year Graduation Project: “Extending the Connections of a Computer Network using Optical Fibres”. |  |

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| PERSONAL SKILLS |   |

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| Mother tongue(s) | Arabic |
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| Other language(s) | UNDERSTANDING  | SPEAKING  | WRITING  |
| Listening  | Reading  | Spoken interaction  | Spoken production  |  |
| English | Excellent | Excellent | Excellent | Excellent | Excellent |
|  |  |
| German | Intermediate | Intermediate | Beginner | Beginner | Intermediate |
|  | Goethe B.1 Certified |
|  | Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user[Common European Framework of Reference for Languages](http://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr) |

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| Publications |   |

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|  | **Jawad, G.N**.; Sloan, R.; Missous, M., "On the Design of Gyroelectric Resonators and Circulators Using a Magnetically Biased 2-D Electron Gas (2-DEG)," in IEEE Transactions on Microwave Theory and Techniques, , vol.63, no.5, pp.1512-1517, May 2015**Jawad, Ghassan Nihad**, and Sloan, Robin. "Bandwidth Optimisation for Semiconductor Junction Circulators." Progress In Electromagnetics Research C 56 (2015): 125-135.**G. N. Jawad**, C. I. Duff and R. Sloan, "A Millimeter-Wave Gyroelectric Waveguide Isolator," in IEEE Transactions on Microwave Theory and Techniques, vol. 65, no. 4, pp. 1249-1256, April 2017.**Jawad, G.N**.; Duff, C., Sloan, R., “A New Class of Millimetre-Wave Nonreciprocal Devices Utilising Gyroelectrically Loaded Waveguide Cavities,” Submitted for publication in the Proceedings of the Royal Society A (March 2017). **Jawad, G.N**.; Sloan, R., "A low magnetic bias sub-millimetre wave semiconductor junction circulator," in 2014 9th European Microwave Integrated Circuit Conference (EuMIC), vol., no., pp.640-643, 6-7 Oct. 2014**G. N. Jawad** and R. Sloan, “Millimetre wave semiconductor based isolators and circulators,” in IET Colloquium on Millimetre-Wave and Terahertz Engineering Technology 2015, March 2015, pp. 1–8Jawad, G.N.; Duff, C., Sloan, R., "A Q-Band Gyroelectric Waveguide Isolator ," Asia Pacific Microwave Conference, New Delhi, India, December 2016.**Jawad, Ghassan Nihad**, Christopher Duff, and Robin Sloan. "A semiconductor based millimeter-wave waveguide junction circulator." European Microwave Conference (EuMC), 2017 47th. IEEE, 2017.Muhammad F. Akbar, **Ghassan N. Jawad**, Laith R.Danoon, and Robin Sloan. " Delamination Detection in Glass-Fibre Reinforced Polymer (GFRP) Using Microwave Time Domain Reflectometry." European Radar Conference (EuRAD), Madrid, 2018.Akbar, Muhammad F., **Ghassan N. Jawad**, Christopher I. Duff, and Robin Sloan. "Porosity evaluation of in-service thermal barrier coated turbine blades using a microwave nondestructive technique." NDT & E International 93 (2018): 64-77.Ridha, Oday ALA, **Ghassan N. Jawad**, and Sadeq F. Kadhim. "Modified Blind Source Separation (BSS) for Securing End-to-End Mobile Voice Calls." IEEE Communications Letters (2018).  |