
Mehdi Shokri Zadeh

OBJECTIVE

- To pursue jobs in the Field of Electrical and Electronic Engineering, (DSP, Electronics, Software Development) and/or Computer Networks

WORK EXPERIENCES

- **Nov. 2016 – Present:** Alzahra University, Tutor and Lecturer, Department of Electronic Engineering
- **Nov. 2014 – Present:** Iran DSP Centre (IDC), Design and Development of DSP Based Kits/Modules, *Tehran, Iran*
 - ✚ Provisioning of Optimum Solutions for Educational Institutes, Industrial Entities and Business Driven Manufacturers
 - ✚ Implementation of Evaluation Boards (EVB), DSP Starter Kits (DSK) and Customised Solutions
 - ✚ Embedded C/C++ Coding
 - ✚ Board Level Design
 - ✚ Holding Class-Room Based Educational Camps to Deliver the Necessary Operational Knowledge of IDC Products to Customers.
- **Nov. 2012 – Nov. 2014:** Motorola Solutions, Senior Design Engineer in Software Development and Radio Communication Systems, *London, United Kingdom*
 - ✚ Developing the Text Messaging Core of Motorola's XNL/XCMP in VC++
 - ✚ Provisioning of Radio Text Messaging Over TCP/IP within the Text Messaging Core
 - ✚ Development of Graphical User Interface Application for XNL/XCMP Voice and Messaging
 - ✚ Conversion of Analogue Radio System to be Capable of Sending Data Over TCP/IP - *Intercessor*
 - ✚ Design and Expansion of Customised Embedded Radio Systems for Customers Across UK:
 - NHS Hospitals Across UK
 - London Underground – Transport for London (*TFL*)
 - University of Cambridge's Addenbrooke's Hospital (*UK Largest*)
 - Westfield Shopping Centre – London (*Europe's Biggest Indoor*)
 - Bicester Village Shopping Centre – Oxford (*Europe's Biggest Outdoor*)
 - Arla Foods (*Europe's Largest Dairy Manufacturer*)

- **Aug. 2010 – Nov. 2012:** UKNA, Audio-Visual R&D Department, Design Engineer, *London, United Kingdom* – Part Time
 - ✚ Design Active and Passive xOver Modules for Tower Speakers
 - ✚ Developing DSP-Based (TI 6713) Audio Processing Kit for Denoising, Audio Enhancement and Equalization, Reverberation Suppression and Amplification.
 - ✚ R&D on Next-Gen Speaker Cones

- **Sep. 2008 – Nov. 2010:** Turkaz Enerji, Market Research Management, *London Branch, United Kingdom* – Part Time
 - ✚ Market Evaluation for Coned Shaped-Cement Power Distribution Towers
 - ✚ Organising Validity, Reliability and Safety Tests in ABB Test and Measurement Sites
 - ✚ Patent Registration and Legal Authentication in the UK

- **Sep. 2006 – March 2008:** IEEE Student Branch of Queen Mary, University of London, *United Kingdom* - Volunteer
 - ✚ Organiser and Representative
 - ✚ IEEE 2008 EMEA Annual Meeting Host Held at Queen Mary

- **Sep. 2005 - June 2006:** Technical Assistant, Audio Broadcasting, *Tehran, Iran* – Internship
 - ✚ Maintenance of Digital and Analogue Equipment

- **Sep. 2003 – Aug. 2006:** Iran DSP Centre (IDC), Design and Development of DSP Based Kits/Modules, *Tehran, Iran*
 - ✚ Business Start-up
 - ✚ Documentation
 - ✚ First Few Product: Design and Production
 - ✚ Market Research

- **June 2003 - Sep. 2005:** Robocup Research Lab, Iran University of Science and Technology, *Tehran, Iran* - Volunteer
 - ✚ Image Processing for Pattern Detection and Recognition of Robots Identities and Geometric Location
 - ✚ Design and Implementation of the Controller Unit for the Small Size Soccer Robot Using Xilinx FPGA (Spartan III) and VHDL

EDUCATION

- **Aug. 2009 – Aug. 2012:** Imperial College London & Queen Mary, University of London (Joint-Degree): PhD in Electronic Engineering, *London, United Kingdom*
 - ✚ Real Time Blind Source Separation in Acoustic Environment, Centre for Digital Music (C4DM)
 - ✚ Implementation on Texas Instruments' DSK-6713
 - ✚ Re-Developing the Algorithm for Microsoft Kinect, Making Use of Microphone Array and 3D Infrared Depth Sensor
 - ✚ Creation of an Android-Based Application to Perform Semantic Source Separation to Aid Visually-Impaired People
- **Sep. 2007 - Sep. 2008:** Queen Mary, University of London: MSc Digital Signal Processing (Distinction Awarded), *United Kingdom*
 - ✚ Advanced Java Programming
 - ✚ Image and Video Processing
 - ✚ Music and Speech Processing
 - ✚ Digital Video Broadcasting
 - ✚ Advanced Transform Methods
 - ✚ Machine Learning
 - ✚ Neural Networks
 - ✚ Pattern Recognition
 - ✚ Artificial Intelligence
 - ✚ Digital Signal Processing (*DSP*)
 - ✚ Thesis in Blind Audio Source Separation: Up-mixing From Stereo to Multi-Channel Audio Representation Using BSS Techniques
- **Sep. 2001 - Jun. 2006:** Iran University of Science and Technology (IUST): BSc. in Electrical and Electronic Engineering, *Tehran, Iran*
 - ✚ Antenna Design, Microwave and Fields, Passive Filter Design, Computer Architecture, Analogue and Digital System Design
 - ✚ Thesis in Design and Implementation of an Intermediate Frequency (*IF*) Board for DVB-T Transmitter Using Texas Instruments' DAC-5686 and 'Analog Device's DDS-9952 (In Collaboration With IRIB), Digital Communication and Control System (DCCS) Lab

SKILLS

- **Programming Languages:** C, C++/VC++, MATLAB, VB.NET, Delphi, Java (Servlet), Javascript, HTML, PHP, Python, QT, Full Stack Python Web Design (HTML, CSS, Javascript, Bootstrap, JQuery, Python, Django, sqlite), MEAN Full Stack (MongoDB, Express, Angular.js, Node.js), MERN Full stack (MongoDB, Express, React,

Redux, Node.js), Kotlin, Julia, Node.js

- **Hardware Programming:** DSP (CCS), AVR, PIC, Z80, 89C/S51, VHDL, Proteus, Orcad, Quartus, Xilinx ISE
- **PCB Design:** Protel, Altium, Eagle
- **Networks:** CCNA R/S, CCNP Route, CCNP Switch, CCIE R/S, CCNA Security, CCNP Security (ISE, Dot1x, Firepower), CCNA/CCNP Collaboration, CCNA Data Centre, Linux LPIC1&2, Elastix, Mikrotik (MTCNA, MTCRE # 1604NA1011), VMWare VCP, VMware Horizon, Juniper SRX, Microsoft Exchange, CEH, PenTest Scripting, ITIL, ELK(Elasticsearch, Logstash, Kibana), Docker with Kubernetes and AWS ECS
- Knowledgeable in Embedded System Design, Hardware Coding and System-on-Chip (SOC)
- **Teaching:**
 - ✚ Machine Learning, Circuit Board Design, C and Matlab Programming: Imperial College London, Queen Mary University of London: 5 Years
 - ✚ Motorola's Design, XCMP and Software Integration Course: Held at Various Locations Across Europe: 2 Years
 - ✚ Python, Java, Matlab, Node.js and C++ Coding: Private and Organisational Level, Tehran, Iran: Since Mid. 2014
 - ✚ FPGA Design and Coding: Private and Organisational Level: Since Mid. 2015
 - ✚ DSP Design and Embedded C Coding: Camp-Based and Organisational Level: Since Mid. 2015
 - ✚ IELTS: Various Institutes, Organisational and Private Level: Since Mid. 2015
- Familiar with IPTV
- Familiar with Adobe Design Suit, Fusion, ASP.NET, LabView

PROJECTS

- Customer Dispatching Software for DMR radios for NHS Health Care (32 Sites and Hospitals), Motorola Solutions, London, UK
- Customer Dispatching Software for DMR radios for Addenbrooke's Hospital, Cambridge, UK
- Text Messaging Core for Motorola's Radio Equipment, Motorola Solutions, London, UK
- Conversion of Analogue MPT1327 Radio Dispatching Software to be Compatible with TCP/IP Stack, Motorola Solutions, London, UK
- Design and Implementation of Radio Security Solutions for Westfield Shopping Centre, London, UK
- Design and Implementation of Radio Security Solutions for Bicester Village, Oxford, UK
- Design and Implementation of Radio Security Solutions for

Shakespeare's Globe, London, UK

- Conversion of Motorola's TETRA Radio System to TCP/IP Stack for London Underground
- Design and Implementation of Radio Security Solutions for Arla Foods, Aylesbury, UK
- Design a Real-Time Audio Source Separation Algorithm Based on TI DSK 6713 using C++ for a Private Customer in the UK (Conformity of Name Concealment is Signed)
- Audio Channel Upmixing (Stereo to 5.1 Surround sound) Using Blind Source Separation (BSS) with Implication of ICA and DUET Methods with C++ and MATLAB
- Implementation of Horizon Detection of the Earth Crust and 3D Reconstruction of Each Layer for Oil Reservoir Detection: British Petroleum
- Implementation of Object Detection Algorithm Using C++: West London Security Company
- Implementation of Pattern Detection and Recognition Using VHDL and C++ for Soccer Robots: Arian Robocup Team
- Developing an Image Processing Toolbox for MATLAB: Part of the MSc Course
- Implementation of 'Markov Model' and 'Huffman Coding' by MATLAB: Privately Funded Project
- Implementation of an EVB for TI TMS320F240, F2812, C55xx, C6713, C6416, and Xilinx Spartan III, Spartan VI: Part of IDC Design Process
- Implementation of an EVB for AD 9858: Part of Digital Switch-Over requested by IRIB
- Implementation of an AI Discriminant Function Using 'Perceptron' Algorithm by MATLAB: On Private Basis
- Design and Implementation of an Optical Frequency Meter Using ATMega16: Requested by Industrial Machinery Lab at IUST

AWARDS

- **Sep. 2002:** 1st award of "*National Robotic Competitions*" ,Shiraz, Iran
- **Sep. 2003, 2004 & 2005:** Received "*Elite Member of Arian Robocup Team of the Electrical Engineering Department* " Letter of Commendation, IUST
- **Sep. 2007:** £2000 Scholarship from Queen Mary, University of London
- **Sep. 2009:** Full Scholarship from EPSRC for PhD Course, UK

PROFESSIONAL MEMBERSHIP

- Member of IEEE (Communications and Signal Processing Societies)
- Member of IET

REFERENCES

- Available Upon Demand.