# **CURRICULUM VITAE**

# PERSONAL INFORMATION

Name :	Mazahim Guliyev
Nationality:	Azerbaijani
Date of birth:	24.03.1973
Marital status:	Married
Place of birth:	Hajigabul reg., Azerbaijan
Cell phone: E-mail:	+994 55 567 70 74, +994 50 328 33 04 mazahim.guliyev@gmail.com

# **EDUCATION**

1994-1998	Azerbaijan Technical University Doctoral Studies PH.D <i>(Candidate of Technical Sciences)</i> Specialty: Radioengineering Devices and Communications Systems
1989-1994	Azerbaijan Technical University Faculty of Radioengineering, Specialty: Design and Technology of Radioelectronic Devices / Diploma of Honours

1979-1989Secondary school # 5 in Hajigabul region, Azerbaijan

# **GLOBAL EXPERIENCE in INTERNATIONAL ORGANIZATIONS**

2007 - up to 2015	Focal point of International Telecommunication Union (ITU) Study Group 4 (Satellite Services)
2013 - 2016	Vice- chairman of Region C <i>(Eastern Europe and Northern Asia)</i> for the Assembly of Parties of International Telecommunication Satellite Organization

# WORK EXPERIENCE

2019 september - up to now	Chair Associate Professor, Department of Computer Engineering, Azerbaijan State Oil and Industry University (ASOIU)		
05/03/2016 - up to 05/09/2019	Chief Specialist, State Management of Radiofrequencies, Ministry of Communications and High Technologies		
2013 - up to 05/02/2016	Technical Director of "AzInTelecom" LLC of Ministry of Communications and High Technologies		
	Duties and Responsibilities include:		
	<ul> <li>Design, build and commissioning of Azerbaijan's first Uptime Institute TIER- III Certified Datacenter (obtained Design and Constructed Facility Certifications). Datacenter should be capable to provide an Uptime of 99,982%;</li> <li>Preparation of Request for Proposal(RFP) of Technical Specifications for Building a TIER- III Datacenter for AzInTelecom LLC;</li> <li>Bill of Material for Precision AC and Spilt AC for Datacenter including UPS system, Intelligent Building Management Systems, Server racks, Passive Devices/Networking (LAN) and Cable trays, Civil works, Fire Supression systems with NOVEC 1230, Electrical and Diesel Generator, Rodent Repellant System.</li> <li>Preparation of Cloud Computing strategy(public and private cloud). Network infrastructure virtualization concept(based on VMware VSphere 5.5, Citrix, NSX, SAP, NetApp and etc.);</li> <li>Preparation and negotiations for obtaining ISO -27001:2013-Information Security Management Systems;</li> <li>Supply, Installation and Commissioning of IP based International Gateway Exchange(IGW) and Billing Center in Azerbaijan on Turn-key Basis;</li> <li>Preparations of Request of Proposal (<i>RFP</i>) of technical conditions and specifications of IGW;</li> <li>Preparations of main Requirements of Media Gateway, Charging facilities, Signaling, Protocols, Interfaces, System observations and Measurements Facilities, Power Plant and air-conditioning Facilities and Ancillary Facilities;</li> <li>Preparations of capacity requirements of each Gateway Router, Capacity Requirements of each LAN Switch, Capacity requirements of each Firewall;</li> <li>Knowledge in routing, security, firewalls, routing protocols such as OSPF, EIGRP, BGP;</li> <li>Experience in managing the team of systems, planning and coordination, as well as delivering special projects for installing new and or upgrading the existing infrastructures;</li> <li>Working experience with common ITIL Service Lifecycle processes such as service, strategy, serv</li></ul>		

Recovery, Open-Stack implementation, Support, 3Par, Pure, and EMC;Experience in RF survey, BTS, microwaves, various RF and wireless activities

like survey, planning, Installation, commissioning, spectrum analysis, installation, as well as commissioning of BTS sites;

- Experience in planning, forecasting, implementation, and identification of resource requirements for virtualization and storage systems of high complexity;
- Experience in utilizing effective engineering practices that support standards, which enhances virtualization and storage availability, performance, proactive monitoring and reliability;
- Experience in ensuring that the virtualization and storage infrastructure has been designed and installed to meet customer requirements on contracted solutions;
- Experience in adding programs, software and hardware that are required to meet solution requirements;
- A multi-year experience in IT infrastructure virtualization and storage implementation, as well as VMware virtualization in large infrastructure deployments;
- Experience in designing, implementing and configuring highly complex virtualized environments including the ESX/ESXi 4.x/5.x/6.x, vSphere, Vrealize, Automation/Orchestration and PowerCLI;
- Experience in designing, implementing and maintaining storage area network (SAN) environment and network attached storage (NAS) environments;
- Experience in working within the virtualized and cloud environment interfacing with VMWare ESX hosts, and Microsoft Hyper-V, etc.

#### 24.02.2012- up Chief Counselor,

#### to 2013 Department for Coordination of Activities of State Enterprises Ministry of Communications and Information Technologies

Duties and Responsibilities include:

- Coordination of Azerbaijan's satellite networks with other countries' (FSS planned and unplanned, BSS) satellite networks pursuant to ITU Radio-regulations;
- Preparation of Advanced Publication Information (API), Coordination Request Circular (CR/C), and filing all these to ITU as Filing Satellite Networks;
- Coordination procedures for space systems and earth systems;
- Capture, processing and publication of data and examination of frequency assignment notices submitted by administrations;
- Managing technical issues with United Nations' Office of Outer Space Affairs.

#### 29.03.2011 – Deputy Chairman,

#### 24.02.2012 "Azercosmos" Open Joint- Stock Company Ministry of Communications and Information Technologies.

Duties and Responsibilities included:

- Procurement and design of "Azerspace" first GEO telecommunication satellite of Azerbaijan and took major role in holding negotiations in terms of installation of ground station for LEO Earth observation satellites ("Azersky" Spot 6 and 7);
- Preparation of Request for Proposal (*RFP*) of the satellite manufacture;
- Preparation of Request for Proposal (*RFP*) of the launch vehicle;
- Managing Preliminary Design Review (PDR) and Critical Design Review (CDR)

of the Spacecraft and Ground System;

Preparation of the BUS (ACS, EPS, CDH, Structure and Mechanical and Thermal Sub-System) and Payload system performance (CINET, CONET, KINET, KONET, CDF, TRF, TC, SPA, Beacon Transmitter, CMR, TTX, DLSTWTA);

In addition, I have an ample knowledge in satellite industry and a practical experience in daily activities of both GEO and LEO satellite operations, including but not limited to the operation of the TT&C for Ground Systems:

- Satellite Control Facility (SCF) Workstation (Satellite Control Station, Status and Control Station) and Computer Subsystems (PROCESSING REQUIREMENTS, REAL TIME TELEMETRY, ORBITAL ANALYSIS / FLIGHT DYNAMICS, SATELLITE ENGINEERING, STATUS AND CONTROL INTERFACE, SATELLITE CONTROL, DEVELOPMENT STATION, CONFIGURATION CONTROL, REDUNDANCY);
- Telemetry, Command and Ranging (*Baseband Equipments*) including **TELEMETRY, COMMAND, AND RANGING BASEBAND, BASEBAND REDUNDANCY**;
- Telemetry, Command and Ranging (*RF Equipments\Systems*) including AVAILABLE EQUIPMENT, ANTENNA (*Monopulse or step-track, ACU, Tracking Receiver, LNA Conroller, Antenna Drive Unit*), Test Loop Translator, Waveguides, routing and switching assembly, LNA/LNB, HPA (*Klystron*), UP/DOWN CONVERTER, TIMING SUBSYSTEM, RF REDUNDANCY;
- Experience with Link budget calculations and tools in L, S, C, X, Ku and Ka Band, which I have made fully operational for the existing satellite in GEO;
- ORBITAL ANALYSIS STATIONS (OAS);
- SATELLITE ENGINEERING STATIONS (SES);
- DYNAMIC SATELLITE SIMULATOR (DSS);
- GROUND SYSTEMS TESTS (FACTORY ACCEPTANCE TEST, SITE ACCEPTANCE TEST, GROUND TO SATELLITE COMPATIBILITY TEST, SCF TO SATELLITE COMPATIBILITY TEST, MISSION CONTROL CENTER(MCC) TO SATELLITE COMPATIBILITY TEST, MCC TO SCF COMPATIBILITY TEST,
- TURN AROUND RANGING (TAR);

01.01.2010-Head,29.03.2011Satellite Communications and New Technologies DepartmentInternational Relations and Accounting CentreMinistry of Communications and Information Technologies of Azerbaijan

Duties and Responsibilities included:

- Satellite transponder planning and Frequency Assignments (C, Ku, and Ka bands)
- Investigation of new wire line and wireless technologies and their applications in Azerbaijan telecom networks;
- Reviewing and studying İTU resolutions, signal protocols and their harmonization and compatibility with telecommunications networks in Azerbaijan;
- Working on the Project of the first telecommunication satellite of the Republic of Azerbaijan;
- Participation at the ITU –R study group 4 (satellite services) and application of the results;
- Investigation and proposals concerning circular documents from İTU;

- Processing of filings for Azerbaijan geostationary satellite system;
- Implementation of ITU rules and principles in Azerbaijan;
- Studies on compatibility of broadband wireless Access (BWA) systems and fixed-satellite service (FSS) networks;
- Responsible for studies on national and international satellite systems, international satellite organizations, activities related to the spectrum and to satellite systems regulations;
- Responsible for the design of Azersat communication satellite systems and coordination of their frequencies;
- Participation at the regional organizations such as CEPT and RCC meetings in view of preparation for WRC;
- The state program on establishment and development of space industry in the Republic of Azerbaijan;
- Simultaneously, working as a focal point for matters related to the ITU-R

### 2004-2009 Head, New Technologies Department International Relations and Accounting Centre Ministry of Communications and Information Technologies of Azerbaijan

Duties and Responsibilities included:

- Holding daily accounting of incoming and outgoing voice traffic and its analysis;
- Implementation of interconnection channels with international telecom operators;
- Preparation of proposals in regard to strengthening our positions at the international voice traffic market;
- Investigation of bids from famous telecom companies regarding purchasing of required communication in view of application of new NGN Technologies;
- Implementation of relevant measures for state programs adopted regarding development of communications and information technologies in Azerbaijan;
- Preparation of documents of the field of telecom technologies and information networks.

# 2003-2004Engineer-electrician,<br/>Satellite and Radiorelay Communication Department<br/>TV and Radio Broadcasting Entity (Satellite Earth Station)<br/>Ministry of Communications and Information Technologies of Azerbaijan

#### Duties and Responsibilities included:

- Control of various satellite carriers and operators capacity;
- Daily technical support for on ground satellite stations;
- Implementing control on VSAT stations;
- Carrying out negotiations different satellite operators for capacity procurement;
- Preparation of materials in view of maintenance ad usage of information systems and new technologies.

1995-2002	Researcher,	
	Chair of Radio-electronic Devices and Microwave Engineering	
	Azerbaijan Technical University	

## TEACHING EXPERIENCE

2008- up to now Senior Lecturer, Chair of Radio-communication Devices and Electrodynamics, Azerbaijan Technical University Optical Communications Systems, Transport networks (SDH, DWDM, *IP/MPLS*, *etc*); Microwave Engineering; Satellite Communications and Systems; Digital TV and Broadcasting. \_ 2012 - up to now Senior Lecturer, Chair of Electronics, Telecommunications and Radiocommunications, Khazar University Mobile Communications Systems; Electromagnetic Waves and Radiowave propagation. -

#### **FELLOWSHIPS:**

2002	European Union Tempus project project,	
	Subject: Electronics and its application of auto navigation systems,	
	Cologne, Germany	

#### LANGUAGES

English	Advanced
Russian	Advanced
German	Advanced
Turkish	Advanced
Azerbaijan	Advanced

**COMPUTER SKILLS:** MS Office programs: Word, Excel, Power Point

#### TRAININGS, CONFERENCES, SEMINARS ATTENDED:

- Moscow, Russia to take part at the "Broadband for All", an International Conference in 03-05.11.2004;
- Montpellier, France on 24-27.11.2004 to participate at the IDATE (France) International **Conference on Internet Act II;**
- Belgrade, Serbia and Montenegro in 20-24.06.2005 to participate at the "International -Telecommunication Union (ITU) Regional Conference on Next Generation Network (NGN)";
- Minsk, Belarus on 08-10 November, 2005 to participate at "International Conference on Telemedicine";
- Geneva, Switzerland on 17 18 November 2005 to participate at the International Conference on Satellite Communications organized by ITU;
- Chennai, India on 19 22 March 2006 to participate at the International Conference and Exhibition "IndiaSoft-2006";
- Biennial Seminar of the Radio-communication Bureau organized by ITU Radio-communication Bureau 30 October – 3 November 2006, Geneva, Switzerland;

- Conference Preparatory Meeting **World Radio-communication Conference** February 19 March 02, 2007, Geneva, Switzerland;
- 8<sup>th</sup> meeting of **CEPT** (European Telecommunications and Post Administrations) **Conference Preparatory Group** (CPG), 16 April 2007, Istanbul;
- Workshop on Training and trials on network planning tools for evolving network architectures.
   4-8 June 2007, Moscow, Russia;
- 11<sup>th</sup> meeting of CEPT **Conference Preparatory Group Project Team** 1, 11-14 June 2007, ERO, Copenhagen, Denmark;
- On the Invitation of Germany manufacture company, "Rohde & Schwarz", on
- establishment of certification laboratory of radio-communication devices at IR&AC (International Relations and Accounting Centre), the Ministry of Communications and IT of the Republic of Azerbaijan, 02-06 September, 2007;
- Conference Preparatory Group(CEPT CPG), 19-23 February, 2008, Paris, France;
- **CEPT Working Group FM (Frequency Management) Meeting,** 19-26 May, 2008, Brussel, Belgium;
- Malaysian Technical Cooperation Programme (MTCP) with Multimedia College, Telekom Malaysia Berhad Only, 15 July 21 August, 2008. Malaysia;
- World Radio-communication Seminar for Satellite Services, 08-12 December, 2008, Geneva, Switzerland;
- ITU's Satellite Services Study Group, 08-19 September, 2009, Geneva, Switzerland;
- Ancotel CNX-3 International Telecom Operators Meeting, 26-27 October, 2009, Frankfurt, Germany;
- European Telecommunication Administration Conference(CEPT), 5<sup>th</sup> CPG-12 meeting, 24-26
   February 2010, Azores Islands, Ponta Delgada, Portugal;
- ITU's Satellite Services Study Group, 06-17 July, 2010, Geneva, Switzerland;
- **"Azerspace" Satellite's Manufacture (Orbital Sciences Corporation) meetings**,18-26 January and 11-18 July 2011, Washington, USA;
- **United Nations, General Assembly**, Office of Outer Space Affairs, 49<sup>th</sup> session, session of scientific and technical subcommittee, 06-14 February 2012, Vienna, Austria;
- Various conferences of **International Telecommunication Satellite Organization** as a vice chairman in Washington in USA. 2013-2015 years.

#### PUBLICATIONS, SCIENTIFIC PAPERS:

- 1. The Algorithmization of microwave components on the basis of topological Y-models
- 2. The Algorithmization of microwave components of topological K-models
- 3. Electromagnetic analysis of micro strip line
- 4. The calculation of magnetic cylinder in the linear current by transformation method
- 5. The calculation of electromagnetic field of the rectangular waveguide by secondary sources

Azerbaijan research institute of technical and economical researches Baku 1996

Azerbaijan research institute of technical and economical researches Baku 1996

Azerbaijan research institute of technical and economical researches Baku 1996

Azerbaijan research institute of technical and economical researches Baku 1996

Azerbaijan research institute of technical and economical researches Baku 1996

6.	The calculation of Laplasov's field by Monte-Carlo method	Azerbaijan research institute of technical and economical researches Baku 1996
7.	The analysis of rectangular waveguide by finite elements method	Scientific papers, Baku, AzTU-1997
8.	Electromagnetic wave scattering by a film resistive structure in a cylindrical waveguide	Scientific papers, Baku, AzTU-1997
9.	The programmed realization of finite differences method for the calculation of electromagnetic waves in volume cavity	Scientific papers, Baku, AzTU-1997
10.	Experimental measurement reflection coefficient in the circular waveguide	Azerbaijan International Scientific Conferences of Development of the radio communications Baku, AzTU-1998
11.	Development of elements of controlling electrodynamics systems	State budget scientific work registration № 0195 Az 00775, Baku 2001
12.	Definition of electromagnetic fields of cylindrical waveguide by finite elements method	Journal of physicist and mathematics №4, Baku 2003
13.	Experimental measurement of microwave parameters by measure line	Scientific papers, Baku, AzTU-2003
14.	Evaluation of electromagnetic compatibility of the satellite ground facility and etc.	Scientific papers, Baku, AzTU-2011
15.	Development of satellite industry in Azerbaijan	Journal "Elektrosvyaz", Moscow, Russia ( <i>in Russian language),</i> 2014