

Alexandru Mihai Popa
Consultant | Solution Architect | Engineer | Trainer
Bucharest, Romania

Summary

I am a telecom networks professional with over 13 years of experience, period during which I have occupied roles such as technical consultant/ solution architect, business owner, technical trainer, network engineer, technical coordinator, project owner/ coordinator and team leader.

I am looking to transition into software engineering roles.

Education:

- MEng, in Services and Computer Networks (ongoing – UPB)
- BEng, in Telecommunications Networks & Software (UPB)
- BSc, in Business Management (ASE)

Technical experience:

- Python programming
- Optical networks design and maintenance
- OSS design
- IP networks

Programming skills:

- Python, Django,
- Basic Javascript, HTML, CSS

Work Experience

2015 – Present

Transport Networks Consultant & Solution Architect

Company name: AMP Networks & Communications

Location: Bucharest, Romania

Role description: *Transport Networks consultant*

Client name: *European telecom operator*

Date: *May 2018 - Present*

Role description:

- Coordination of rollouts, equipment swaps, new installations and equipment upgrades.
- Collaborating with Project Managers, equipment vendors, Operations, Change Management, field engineers and other 3rd party teams for the implementation of changes within the transport network.
- Technologies/ equipment: DWDM, IP

Role description: *OSS Solution Architect*

Client name: *European telecom operator with local presence*

Date: *December 2019 - Present*

Role description:

- I am in charge with designing the technical solution and documenting the HLD and LLD for the OSS systems migration.
- Domains: optical networks Element Management Systems (Ciena & ECI) and IT

Systems Managers (CA Spectrum, HP TeMIP, HP NNMi).

2015 – Present
Owner and Trainer

Company name AMP Telecom University

Location Bucharest, Romania

Role description:

I have founded this academy to fill in a gap in the local market, which is carrier-grade telecom trainings.

The academy has successfully delivered affordable telecom training and courses to the entry-level segments (mostly students or entry-level professionals)

Within this organization I am a trainer for the following topics:

- Mobile Access Networks (GSM, UMTS, LTE)
- Radio Access Networks Fundamentals
- IMS Fundamentals (IP Multimedia Subsystem)
- Transmissions Networks (optical and microwave)

Skills:

- Understanding and adapting standards (3GPP, ETSI, etc.) material to course contents

Apr 2016 – Nov 2017
OSS Solution Architect (Consultant for Vodafone Group)

Company name Vodafone

Location Bucharest, Romania

Role description:

Large scale transformation project, covering 13 OpCos and three domains: Monitoring, Ticketing and Network Inventory

My responsibility was over the design of the Fault Management system for RO OpCo. Goal: decommission the local monitoring solutions from 13 OpCos and transit towards one central monitoring tool.

Vendors used:

- Ericsson Granite (for Network Inventory)
- Accenture (for testing)
- HP TeMIP/ OSS Console (for Network Monitoring)
- Archibus (for Trouble Ticketing system)

Activities:

- harmonize alarm fields between OpCos and the central solution
- setup connectivity matrixes between local OpCO element managers and central monitoring systems
- looking into design solutions
- analyzing alarms flows patterns for each OpCo and providing the info to the vendors in order to scale up/ down the systems to accommodate those parameters.
- documenting adopted solutions
- attending to various stakeholders meeting

Jun 2014 – Jan 2016

Domain Manager & Senior Technical Coordinator

Company name SII Romania

Location Bucharest, Romania

Role description:

During this role I was in charge with managing a department of three transmissions teams, growing the team to a total of 40 people:

- Backbone transmissions team
- Low debit transmissions team
- FTTx team

I also served as the technical consultant of the department.

Some of activities within this role:

- recruitment (technical and soft-skills process)
- designing technical tests for interviews
- conducting individual performance management discussions
- evaluation
- improving processes & procedures (especially regarding interactions between the teams and the client)

Sep 2013 – Jun 2014

Senior Engineer & Project

Owner Company name SII Romania

Location Bucharest, Romania

Role description:

For this project, I was the first employee on a new backbone transmissions network engineering, planning & design project for Bouygues Telecom (France).

The technical domains I have acted upon:

- optical transmissions, microwave transmissions, FTTx / PON/ GPON

Vendors used for the equipment:

- ALU/ Nokia, Ciena, Fujitsu

Main equipment used:

- Ciena 6500
- ALU/ Nokia PSS 1830 (32/ 16/ 4)

Technologies used:

- CWDM, DWDM / OTN (40 - 192 lambda @ 100 Gbps), FTTx (GPON)
- coherent transponders for PSS 1830 @ 100Gbps/lambda

Configurations: FOADM (up to 4 degrees) /ROADM/ Colorless ROADM (up to 8 degrees)

Modulations: QPSK/ 8QAM/ 16QAM

Some of activities within this role::

- analyzing new optical network needs in terms of capacity installation
- calculating the optical budget
- planning the optical fiber route
- filling out and checking Bill of Quantities towards the vendor
- writing and delivering the Low Level Design / High Level Design documents
- network design, planning & engineering
- creating the logical lines in the system

Apr 2012 – Sep 2013

Back Office (2nd Level Support)

Engineer *Company name* Ericsson

Location Bucharest, Romania

Role description:

During this role I have been engaged on preventive maintenance and troubleshooting activities within the transmissions network of Mobistar (Belgium)

For this project I took part of the Knowledge Transfer for a period of 3 month. This took place in Belgium.

Domains:

- microwave, optical transport network

Technologies:

- IP, ATM, Packet Links, MPLS, DWDM/ OTN, radio/ microwave

Vendors:

- Huawei, Ericsson, Huawei Some

of activities within this role::

- ticket based troubleshooting
- preventive maintenance (periodical)
- manually adjusting microwave modulations within the 32QAM - 512QAM range

May 2011 – Apr 2012

Back Office (2nd Level Support) Engineer

Company Name Ericsson

Location Bucharest, Romania

Role description:

During this role I have been engaged on troubleshooting activities, preventive maintenance and new radio site acceptance for the H3G Italy operator.

Domains:

- microwave, optical transport network, radio

access Technologies:

- DWDM, SDH, ATM, MPLS, VLAN, IP

Vendors:

- Ericsson, Marconi, Alcatel

Jun 2010 – May 2011

Technical Coordinator (1st Level Support)

Company Name Ericsson

Location Bucharest, Romania

Role description:

During this role I have successfully coordinated a team of 15 engineers. The role had to manage 3 shifts x 12 hours

I was the technical coordinator for specific difficult situations.

Jun 2009 – Jul 2010

Front Office (First Level Assurance) Engineer

Company Name Ericsson

Location Bucharest, Romania

Role description:

During this role I was involved in the 1st Level Support (Monitoring) and troubleshooting on the Mobistar Belgium network.

Monitoring tool: HP TeMIP

Domains covered:

- Core Network
- VAS
- Intelligent Network
- Transmissions (Optical / Microwave / Copper)

Vendors:

- Alcatel, ECI, Nortel, Ericsson

Jul 2008 – Dec 2008

Back Office Activation Agent

Company Name COSMOTE Mobile Telecommunications S.A.

Location Bucharest, Romania

Role description:

During this role I was responsible for activating services for the subscribers/ pre-paid users of the operator.

Jul 2008 – Jul 2008

Intern

Company Name COSMOTE Mobile Telecommunications S.A.

Location Bucharest, Romania

Role description:

Participated for one week and then got hired based on a telecom technical test.

Oct 2006 – Jun 2010

Student Volunteer

Company Electronics Students' Organization

Location Bucharest, Romania

Education

University Name Polytechnic University of Bucharest

Degree Name Master's Degree

Field Of Study: Telecommunications Networks and Software

Dates attended or expected graduation 2019 – 2022

University Name Aeroclubul Romaniei

Degree Name Private Pilot License

Field Of Study Aeronautic

Dates attended or expected graduation 2019 - Present

University Name Academy of Economic Studies in Bucharest

Degree Name Bachelor's Degree

Field Of Study Business Administration and Management

Dates attended or expected graduation 2016 – 2019

University Name Polytechnic University of Bucharest
Degree Name Bachelor's Degree
Field Of Study: Telecommunications Networks and Software
Dates attended or expected graduation 2006 – 2010

Courses and Training

Ongoing: Machine Learning (Andrew Ng, Stanford University – Coursera)

Ongoing: Machine Learning A-Z™: Hands-On Python & R In Data Science (Udemy)

Ongoing: Master Network Automation with Python (Udemy)

Ongoing: Thinking like a programmer

Automate boring stuff with Python (Al Sweigart)

The Complete Python Course (Udemy)

Programming Python (O'Reilly 4th Edition)

Django 2.2 & Python | The Ultimate Web Development Bootcamp (Udemy)

CCNA1

Languages

Romanian (native level)

English (native level)

French (professional level)

Interests

Business

Education

Technology

Investments

Motorcycle riding

Airplanes