Arash Mahmoudian

RF Engineer Data Scientist

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RF Engineer Data Scientist

Recognized for being self-motivated, hard-working, teamwork, committed, able in handling multiple tasks and agile solution. Over 15 years of working experience in the field of Wireless. Possess a creative approach to problem-solving.

TECHNICAL SKILLS

OUTSTANDING SKILLS

Time management | Research-based approach |Data analytics

APPLICATIONS

Accuver |Tems Investigation | Actix | Atoll| AWS| Python| R | C++ | Database | JS | PHP | Tableau

EDUCATION

Bellevue University, NE, US	Sep 2022 - Nov 2023
Master of Science in Data Science	
University of Sabzevar| Sabzevar, Iran	Sep 2005 - Jun 2008
Bachelor's Degree in the Scientific and Applied Field of Electronic	
Technical and Vocational University of Urmia No.1	Urmia, Iran	Sep 2002 - Jan 2005
Associate degree in general electronics.	

RELATED EXPERIENCE

Dish Wireless | Denver CO, US   Mar 2022 – Nov 2023
O-RAN RF Data Scientist

- Developing O-RAN observability Web Application Tool (Station)
- Developed automated O-RAN Configuration Management (CM) audit tool (XML, JSON parsing – GPL, RU Power, Carrier Aggregation Audit)
- Created O-RAN AI/ML Time Series KPI Predictive Model
- Created Tableau dashboards: RAN KPI, LTP, RET, GPL audits.
- Designed and created ZTP/LTP (NXO, Planet) data integrity validation tool (Python, MySQL)
- Created multiple Python, Access, and VBA validation tools.
- Three O-RAN Submitted joint patents:
  1- Radio Digital Twin (RDT) Platform observability KPIs (Vector DB)
  2- RAN Digital Twin representation through real time KPI (Vector DB)
  3- AI enabled CI/CD (CR Approvals)

Samsung-Verizon | Columbus, OH, US   Jun 2021 – Mar 2022
5GNR C-Band RF Engineer III

- Nokia to Samsung Migration
- RF-ATP troubleshooting (4G, CBRS, DSS, and EN-DC C-Band).
- Root cause analysis of low throughput and attach issue of the newly built C-Band sites.
- Non-standalone 5G-NR C-Band KPI analysis XPLT.
- DT Analysis (Accuver)
- Developed multiple Automation Tools

NAK MCI Telecommunication | Tehran, Iran   Jan 2019 – Sep 2019
RF Optimization Engineer (NodeB, ENodeB, RAN)
- Responsible optimizer of most recent mobile technologies 2G, 3G, and LTE
- Provided high radio coverage and quality.
- LTE multi–Carrier Load Balance (Capacity), IRAT neighbor, IRAT HO, CSFB
- Performance (KPI) analysis, Feature Study, Traffic analysis, MIMO
- Analyzed RF measurements (Drive Test) logs (low throughput and poor coverage).
- Post-processing (Actix & Tems Discover), Call flow Signaling Analysis

RighTel & MTN network | Tehran, Iran   Sep 2009 – Jan 2019
RF Optimization and Planning Engineer (NodeB, ENodeB, RAN)
- Planner and optimizer of 2G & 3G & 4G mobile networks.
- Led a team of drive test and optimization engineers (2G,3G,4G)
- Achieved 50% national level 3G KPI (CSSR, CDR, and HOSR) improvement via a comprehensive carrier load balancing strategy among bands/carries along with parameters (Cell PCH, LDR, DRD, SRB over HSPA, Carrier Aggregation, dual carrier, 2ms TTI, SIB 7 and RTWP, TCP pwr, call re-establishment) optimization.
- Provided knowledge-based working environment (seminars), RF Link budget.
- Tested and configured new RNCs (ATP) with the related feature, Spectrum Analyzer (Rohde & Schwarz)

PROJECTS
- Nationwide network design and implementation of a comprehensive carrier strategy for inter/Intra carrier band 3G and 4G interoperability (led Subcontractors)
- The University of Findlay's Physical Plant, OEM Project Volunteer Developer
Developing utility providers' usage data gathering modules by use of Python, develop the database management (MySQL).

PROFESSIONAL ORGANIZATIONS
Vice President of the University of Findlay ACM student chapter	2020 -2021
Vice President of Scientific Electronic Association University of Sabzevar	2006 -2007
Represented the University of Sabzevar in the National Electrical Engineering Forum	2006 -2007
International member of ACM	2020 - 2023
Member of IEEE	2020 - 2023

LEADERSHIP
The University of Findlay, ACM Chapter   Fall 2020
- Plan and organize the events, encourage students to take part in various events.

Host Transistor conference at the University of Sabzevar, Iran   Spring   2006
- Found and sent an invitation to recognized scholars in the field of transistor.
- Assisted peer students to review accepted presentations.

VOLUNTEER
- United Way of Hancock County | Findlay, Ohio   Apr 2020
  Prepared quarantine houses for Covid-19 patients
- American Red Cross | Findlay, Ohio   May 2020 – Aug 2020
  Blood Donor Ambassador: helps and guides blood donors.
- Habitat for Humanity | Findlay, Ohio   May 2020
- Findlay Campfire | Findlay, Ohio   Jun 2020
- City Mission Findlay| Findlay, Ohio (Managed to deliver over 1000   May 2020 – Dec 2021

meals over the course of four months)

COLLEGIATE ACTIVITIES AND CERTIFICATES

3G UMTS Overview, Optimization, HSPA+, LTE overview, Signaling, VoLTE, 5G Overview, Air Interface, RF Optimization, AWS, Glue, S3, API, Data Science

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