MANDEEP MALIK

Current Address : Military College of Telecommunication Engineering, Indore
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WORK EXPERIENCE

Signal Intelligence Proffesional   **2023 - Present**
SIGINT   *Delhi*

· Planning procurement of software defined radios and there deployment
· Attended multiple workshops on GNU Radio, SIGINT, EW and cyber security

Instructor Class - A/ Project Manager   **2019 - Present**
Military College of Telecommunication Engineering (MCTE), Indore   *Indore, M.P*

· Spearheaded 5Gi and 5G projects with IIT-Madras and Nokia Ltd for over 50 Cr to establish 5G Test Bed at MCTE.
· Conceptualized integration of IoT, IoMT, LPWAN with 5G Core
· Completed Nokia Bell Labs BL-100 5G assocciate certification.
· Faculty for M.Tech and B.Tech students for courses in Wireless Networks, MPLS and IoT.

Instructor Class - B   **2016 - 2017**
Military College of Telecommunication Engineering, Indore   *Indore, M.P*

· Teaching Faculty for B.Tech students of ECE.
· Courses taken on Analog Communication, Optical Fiber Networks and Satellite Communication.

Officer Commanding Communications   **2014 - 2016**
Static and Field Communication   *New Delhi*

· Responsible for planning voice communication/ computer network to 800 local subscribers at Shankar Vihar, Delhi through EPABX (Alcatel) and (NEC) and Microsoft domain controller.

Officer Commanding Operations   **2010- 2013**
Rashtriya Riffles   *Rajuri, JK*

· Deputation with Rashtriya Riffles Batallion in Counter Terrorist role, planned multiple operations spanning over days against adversery.

Communications Officer   **2007 - 2010**
Static Communication   *Jammu, JK*

· Responsible for voice communication to 1000 local subscribers at Jammu through EPABX (Alcatel).
· Trunk communication to all Army static/ Field installations using E1/ PRI on Nortel Passport.

Network Analyst   **2005 - 2006**
HCL Technologies   *Noida, UP*

· Router programming on diffrent protocols like ISIS, OSPF, BGP and IGP.

EDUCATION

Indian Institute of Information Technology (IIIT-N) 2021 - 2024
PhD in Wireless Communication *Nagpur, MH*

· Thesis : Optimization of LoRa Communication Parameters For PER Reduction .
· Course Work : Machine Learning and Digital Signal Processing.
· CGPA : 7.9 (Course Work)

Indian Institute of Technology (IIT-R) 2017 - 2019
MTech in Communication Systems *Roorkee, UK*

· Dissertation Stage I : Sensitive and Nonlinear Far Field RF Energy Harvesting.
· Dissertation Stage II : Nonlinear and Efficient RF Energy Harvesting for Backscatter Sensor Network with Extended Communication Range.
· Course Work : Coding Theory, Digital Communication, Crytography, Information Theory and Filter Design.
· CGPA : 7.43

Military College of Telecommunication Engineering (MCTE) 2013 - 2014
IT and Communication Course *Indore, M.P*

· One year course in handling Computer/Data Networks, Optical Networks, Cisco Router, L2/L3, MPLS, STM1, STM3, Cryptography, PKI and Project Management.
· Grade : 'AI'

Military College of Telecommunication Engineering (MCTE) 2008
Young Officers Course (Signals) *Indore, M.P*

· Six months course for young Officers in basic equipment handing, Radio Relay, UHF Radio, PCM Mux, PDH, SDH, SONET, TDM EPABX, Compuer network.
· Grade : 'B'

Indian Military Academy (IMA) 2006 - 2007
Post Graduate Diploma in Military Science and Warfare *Dehradun, UK*

· One year course for Gentlemen Cadets in Military Tactics, Weapon Handling, Combat Operations and Military History.
· Grade : 'A'

RustamJi Institute of Technology, B.S.F. Academy 2001 - 2005
B.E in Electronics and Communication *Gwalior, MP*

· Percentage : 75.9 (Hons)

PUBLICATIONS

Stand Alone or Non Stand Alone 5G Tactical Edge Network Architecture for Military and Use Case Scenarios **2023, Bangalore**
IETE International Conference on AI and ML Driving 5G Advanced and 6G, e-proceedings Volume IV

Author: Mandeep Malik

Network Slicing In 5G: Possible Military Exclusive Slice **2023, Nagpur**
International Conference on the Paradigm Shifts in Communication, Embedded Systems, Machine Learning and Signal Processing (PCEMS), pp. 48-52

Author: Mandeep Malik; Ashwin Kothari; Rashmi A. Pandhare

Simplified SEP Approximation Of HQAM In Combined Time Shared Nakagami-Lognormal And Rician Fading Channel 2022, London
4th International Conference on "Intelligent Engineering and Management (IEM), pp. 123-127"

Author: Shivam Kumar Garg; Mandeep Malik

Towards 6G: Network Evolution beyond 5G & Indian Scenario 2022, Noida
2nd International Conference on Innovative Practices in Technology and Management (ICIPTM)

Author: Mandeep Malik; Shivam Kumar Garg

5G For Military Communication: Automation of Kill Cycle 2021, Tashkient
International Conference on Technological Advancements and Innovations (ICTAI), pp. 285-290

Author: Mandeep Malik

SKILLS

The Arduino Platform and C Programming Online
University of California

Certification Id : **JUEK8HXBG6WT**

Industrial IoT on Google Cloud Platform Online
Google Cloud

Certification Id : **9NJZXYRMFFUB**

TECHNICAL STRENGTHS

Optical Networks	**OFC, MER/MAR, OTDR, ROW Calculations**
Computer Networks	**IIS, L2/L3 Switches, MPLS routers**
Telecom Networks	**Alcatel/ Siemens EPABX, PCM MUX, E1, PRI, Microwave radios**
Latest Tech	**ML, Google IoT Cloud, LPWAN, Energy Harvesting, Scatter Networks**

COMPUTER SKILLS

Computer Language	**C/C++, MATLAB, PHP, Octave**
Databases	**MySQL**
Tools	**LaTeX, Simulink**

PERSONAL DETAILS

Language Known	**English and Hindi**
Hobbies	**Reading, Swimming and Tennis**
Passport	**Valid Indan Passport issued 2015**

All details mentioned above are correct to the best of my knowledge.