

Ranbir Kumar

TELECOMMUNICATION DESIGNER WITH CORE INFRASTRUCTURE EXPERTISE IN NATIONWIDE ROLL OUT OF FIBER OPTIC NETWORKS, SPECIALIZING IN LARGE-SCALE NETWORK DESIGN, PROJECT MANAGEMENT, AND QUALITY ASSURANCE FOR HIGH-RELIABILITY TELECOMMUNICATIONS INFRASTRUCTURE.

balenordic@tutamail.com · 0411 632 769 · balenorge.dedyn.io · ranbir-bale-8601a63b0/ · routeburn/younghut

Education

NIT Jalandhar – Jalandhar, Punjab, India

Bachelor of Technology in Electronics and Communication Engineering

Communify Pty Ltd, Ventia Australia Pty Ltd – Brisbane, Australia

Certifications in White Card First Aid, CPR, and Fire Warden Training

Experience

Ventia Australia Pty Ltd – West End, Brisbane, QLD

Apr 2023 – June 2025

Network Designer

Designed for NBN FTTH

- ◆ Planned and executed detailed network designs using CAD, incorporating PNI updates
- ◆ Developed in house design solutions for SD1 and SD2 projects and conducted Quality Assurance reviews
- ◆ Performed QA for designs produced by offshore teams, ensuring quality standards were met
- ◆ Managed project tasks and communicated status updates effectively with diverse stakeholders

Ventia NZ Pty Ltd – Auckland, New Zealand

Oct 2013 – Apr 2023

Network Designer

Designed for Chorus NZ

- ◆ Design and deployment of nationwide fiber optic network spanning 15,000+ km with 99.99% reliability
- ◆ Managed \$10M+ in infrastructure projects, consistently delivering on time and under budget
- ◆ Implemented inhouse large scale greenfield network solutions for 200+ residential customers, achieving 4.9/5 customer satisfaction rating
- ◆ First employee to Implement schematic cutover process, reducing service disruption during network upgrades by 90%
- ◆ Utilized automation tools to reduce design time by 30% and improve accuracy of network configurations
- ◆ Site surveys and field inspections to validate design assumptions and ensure successful implementation of network infrastructure
- ◆ Site visits to meet contractors and field teams, providing technical guidance and support to ensure successful project execution
- ◆ Conducted 2000+ site surveys and field inspections to validate designs across diverse geographic locations.

BSNL – Punjab, India
Network Operations Engineer

Jan 2009 – Jan 2013

Operation and maintenance of the PSTN switch and backbone media gateway.

- ◆ Executed O&M activities, including daily commands and administration of CDOT MBM XL tandem switch.
- ◆ Performed feature testing, configuration, and detailed validation of new software upgrades.
- ◆ Conducted root cause analysis and troubleshooting for network issues, achieving 99.9% uptime for critical services.
- ◆ Led cross-functional teams in resolving complex technical problems, improving overall network performance and reliability.
- ◆ Configured and maintained Ericsson element management system (EMS) for efficient network monitoring and management.
- ◆ Tracing and debugging of signaling issues, ensuring seamless communication across the network.
- ◆ Coordinated with vendors and internal teams to implement network improvements and upgrades, enhancing service quality and customer satisfaction.
- ◆ Developed and maintained comprehensive documentation for network configurations, procedures, and troubleshooting guides, facilitating knowledge sharing and operational efficiency.
- ◆ Tracing faults for lost connectivity to primary and secondary MPBN links, ensuring rapid resolution and minimal service disruption.

All India Radio – Goraya, Punjab, India
Engineeting Assistant

July 2006 – Jan 2009

Operation and maintenance of the AM and FM radio transmitters.

- ◆ Conducted regular maintenance and troubleshooting of AM and FM radio transmitters, ensuring uninterrupted broadcasting services.
- ◆ Monitored and optimized transmitter performance, achieving 99.9% uptime and high-quality audio transmission.
- ◆ Studio to transmitter link (STL) maintenance, ensuring reliable communication between the studio and transmission sites.
- ◆ High power transmitters 2x100 kw AM and 300 kw AM maintenance, ensuring optimal performance and compliance with regulatory standards.
- ◆ Tuning and optimization of radio frequency (RF) parameters to enhance signal strength and parallel operation of 2x100 kw AM transmitters.

Projects

Ollama, Fabric-AI, PAI, LMStudio, Hermes Deployment – Brisbane, Australia

June 2025 – present

Open-source platform for self-hosting AI models.

- ◆ Achieved seamless deployment of 7+ AI models, including LLaMA 2 and Mistral, on local hardware with user-friendly interfaces.
- ◆ Adapted and optimized models for efficient performance on consumer-grade hardware, reducing latency by 40% and improving user experience.
- ◆ Deployed Ollama, Fabric-AI, PAI, LMStudio, and Hermes on local servers, enabling users to run AI models without reliance on cloud services.
- ◆ Implemented Hermes AI with matrix chat bot integration, providing real-time AI interactions and enhancing user engagement.

SIEM Implementation and Detection Engineering – Brisbane, Australia

June 2025 – present

Implementation of SIEM solution and development of detection rules for cybersecurity monitoring.

- ◆ Deployed a centralized logging and monitoring solution using Grafana, Loki, and Promtail, for home network monitoring.
- ◆ Configured syslog-ng to aggregate logs from openwrt router such as firewall blocks, DNS queries, authentication attempts, and service failures.
- ◆ Created automated alert rules for threat detection, including failed authentication attempts, service availability tracking and resource anomalies.

Monitoring and detection of issues in Linux NixOS/Ubuntu infrastructure using open-source tools.

- ◆ Manage 10+ Linux servers running NixOS and Ubuntu, ensuring high availability and performance for various applications and services.
- ◆ Services including Nextcloud, PostgreSQL, Nginx, redis, and MQTT, with monitoring and alerting for resource utilization, service availability, and performance metrics.
- ◆ Network segmentation with VLANs and firewall rules to enhance security and isolate critical services, reducing attack surface and improving overall network security.
- ◆ Monitor network logs and system logs for suspicious activity, implementing proactive measures to mitigate potential security threats and ensure the integrity of the infrastructure.