

RAMI NOUEIHED

Telecom & Network Engineer | LTE/5G Simulation | Sionna RT | OMNeT++/Simu5G

Location: Lebanon | Phone: +961 78 900 697 | Email: raminoueihed3@gmail.com

GitHub: github.com/rm12000356 | LinkedIn: linkedin.com/in/rami-noueihed

Languages: English (Fluent), Spanish (Native), Arabic (Conversational)

PROFESSIONAL SUMMARY

Telecom and Network Engineer with a growing focus on AI automation and workflow design. Recently completed a master's thesis on 5G OFDMA simulation using Python and NVIDIA Sionna RT, and independently built an AI-driven email automation agent using n8n and the Gemini API. Combines strong technical fundamentals in wireless systems and Python-based analysis with hands-on experience designing automated workflows, integrating APIs, and applying prompt engineering to build reliable AI-powered solutions.

EDUCATION

Master's in Computer Communication Engineering

June 2026

Lebanese International University, Beirut, Lebanon

Bachelor of Science in Computer Communication Engineering

July 2023

Art, Science & Technology University of Lebanon, Beirut, Lebanon

PROJECTS

AI Email Automation Agent — Personal Project

2026

Tech Stack: n8n, Google Gemini API, Workflow Automation

- Built an automated email management system using n8n integrated with the Gemini API to classify, summarize, and route incoming emails.
- Designed prompt logic to ensure consistent, structured outputs from the model across varied email content.
- Implemented trigger-based workflow automation, API authentication, and error handling for unpredictable model responses.

5G Ray-Tracing-Based OFDMA Simulator - Master Thesis Project

2026

Tech Stack: Python, NVIDIA Sionna RT, OFDMA, Wireless Channel Modeling

- Developed a 5G OFDMA simulation framework for multi-user wireless scenarios under realistic channel conditions.
- Used Sionna RT ray-tracing outputs to model path loss, multipath fading, delay spread, and additive noise.
- Implemented configurable transmission and reception chains for different user distributions and channel settings.
- Evaluated BER, SINR, and throughput to support wireless channel analysis and network planning.

Simulation and Performance Analysis of a 4G LTE Network using OMNeT++/Simu5G

2025

Tech Stack: OMNeT++, INET, Simu5G, LTE Performance Evaluation

- Built and simulated a single-cell 4G LTE network with an eNodeB, mobile UEs, and downlink video traffic.

- Compared 50-UE and 100-UE urban macrocell scenarios under user mobility.
- Analyzed throughput, end-to-end delay, resource block allocation, congestion, and QoS behavior.

Vehicular Network and Smart Traffic Simulation using SUMO, Veins, and OMNeT++

2025

Tech Stack: SUMO, Veins, OMNeT++, Vehicular Communication

- Simulated vehicular communication and intelligent traffic-management scenarios.
- Modeled emergency vehicle priority and dynamic rerouting under congestion and accident conditions.
- Evaluated mobility behavior and wireless communication interactions in a smart transportation setting.

PROFESSIONAL EXPERIENCE

Powertech IPT - Network Engineer Internship, Beirut, Sin El Fil

Apr 2023 - May 2023

- Assisted with smart IT system maintenance across field sites, including diagnostics, connectivity checks, and troubleshooting.
- Supported network and access-related tasks for smart metering systems, integrated sensors, and site infrastructure.
- Helped troubleshoot user connectivity issues and participated in site visits to document faults and support system stability.

CERTIFICATES AND TRAINING

- AI course, Nawaya Network (Jun 2026)
- CCNA 1, Cisco Networking Academy (Oct 2023)
- Networking Basics, Skills for All (Oct 2023)
- IT Specialist – HTML and CSS, Certiport (Mar 2023)

TECHNICAL SKILLS

- **Wireless & Telecom:** LTE/5G systems, OFDMA, RAN concepts, wireless communications, BER/SINR/throughput analysis, channel modeling
- **Network Simulation:** OMNeT++, Simu5G, INET, SUMO, Veins, NVIDIA Sionna RT
- **Networking:** Cisco device configuration, TCP/IP, OSPF, VLANs, routing and switching, network security fundamentals
- **Programming & Data Analysis:** Python, NumPy, Matplotlib, Java, C++, JavaScript, PHP, HTML, CSS
- **Tools & Databases:** VS Code, Jupyter Notebook, Git, Cisco Packet Tracer, MySQL, PostgreSQL
- **AI & Automation:** n8n, Google Gemini API, workflow automation, prompt engineering, API integration, AI agent design