SITI NURHAYATI SYAFANINGRUM

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Dayeuhkolot, Kabupaten Bandung

I am a person of high enthusiasm and motivation with leadership, initiative, and ability in public speaking. I wanted to take the role of being an educator, an innovator, and a collaborator in the field of telecommunications for the better future.

Education Level

Telkom University - **Bandung, West Java**   Jun 2023 - Apr 2027 (Expected)

Undergraduate Telecomunication Engineering, 3.92/4.00

- Top 7 Finalist Hackaton Security Palo Alto 2025
- 1st Runner-up SEARCH Essay Competition 2023

SMA Unggulan CT ARSA Foundation Sukoharjo - **Sukoharjo, Central Java**   Jun 2020 - Jun 2023

High School Science, 90.98/100.00

- 1st Runner-up Mba Sukoharjo 2022
- PASKIBRAKA Kabupaten Sukoharjo 2022
- 1st LKBB Kabupaten Sukoharjo 2022

Work Experiences

PT Telekomunikasi Seluler (Telkomsel) - **Telkom Smart Office, Jakarta**   Jul 2025 - Sep 2025

Intership

Perusahaan penyedia layanan telekomunikasi dan produk digital

- Designed and developed a new "Tools" Page for Telkomsel's internal web portal, delivering three productivity tools (PDF Splitter, PDF Merger, and Sentiment Analyzer) as a full-stack developer.
- Created UI/UX wireframes in Figma, translated designs into responsive Vue.js framework, and Built backend services and APIs to support tool operations, including data scraping, text preprocessing, sentiment classification, and database integration.
- Optimized large-scale data queries from Hadoop clusters to serve multiple sub-directorates, enabling faster and more accurate business insights. Custom pipeline scheduler, reducing manual workload and ensuring consistent reporting.
- Developed a Tableau dashboard to visualize fixed service payload insights, empowering stakeholders with actionable analytics.
- Integrated two middleware APIs to collect and normalize customer behavior data from external sources, strengthening Telkomsel's data ecosystem.

Adaptive Network Laboratory - **Telkom University, Bandung**   Apr 2024 - Present

Researcher

Engaged in an international research grant project titled "Empowering IoT Networks with Open-Source SDN using Multi-Tenant Slicing via Ryu Controller and IoT-DLVisor." This research focuses on SDN architecture and IoT implementation using microservices-based Ryu and network slicing.

- Working on a collaborative project with University of Technology Malaysia as a research assistant at SDN architectures for network management and IoT.
- Analyzing research papers and conference publications to identify emerging trends and challenges in SDN, aiming to uncover potential research opportunities that address critical issues in network management and optimization.
- Gaining hands-on experience with a variety of network tools and technologies, such as data plane, switches, routers, network virtualization, SDN controllers, Kubernetes.
- Authored comprehensive research proposals, including the formulation of research background, designing proposed architectures, and planning experimental scenarios to address specific research questions.
- Prepared detailed monthly reports documenting research progress, challenges encountered, and solutions implemented, ensuring transparent and continuous communication with stakeholders. Presented mail stone achievements, constraints, and targets.

Artificial Intelligence Learning and Optimization - **Telkom University, Indonesia**   - Jul 2025

AI-Based Admission Forecasting

Collaborated in a faculty-led research project focused on forecasting student admissions for Telkom University from 2025 to 2030.

- Preprocessed and cleaned historical admission datasets to ensure data integrity and usability for modeling purposes.
- Applied and compared various machine learning models including LSTM, Bidirectional LSTM (BLSTM), and Random Forest for time-series forecasting, utilizing the PyTorch framework in Google Colab.
- Interpreted model outputs to provide actionable insights on program demand trends, identifying potential programs for consolidation or expansion.
- Documented and presented findings to academic stakeholders to support strategic decision-making in academic program planning.

Experience

Teaching - **Telkom University, Indonesia**   Sep 2025 - Present

Lecturer Assistant of Complex Variable

- Selected as a Teaching Assistant for the S1 Telecommunication Engineering curriculum (2024).
- Assisted the lecturer in grading assignments and exams related to complex numbers, analytic functions, and conformal mapping.
- Provided academic support to students struggling with advanced mathematical concepts essential for signal processing and electromagnetic theory.

Teaching   Sep 2025 - Present

Academic Tutor - Probability and Statistics

- Conducted supplementary tutorial sessions for undergraduate students, focusing on probability distributions, hypothesis testing, and stochastic processes.
- Simplified complex statistical concepts to improve students' understanding of data analysis foundations used in telecommunication traffic engineering.

IEEE Telkom University Student Branch - **Bandung, Indonesia**   Jan 2025 - Present

Executive Committee -Secretary

IEEE Telkom University Student Branch is a Telkom University student chapter of the Institute of Electrical and Electronics Engineers (IEEE). Learn about technologies, attend an IEEE congress or conference, doing social activities and also create an event.

- Responsible for managing and maintaining the organisation's administrative operations, including registration, proposals, accountability reports, and correspondence.
- Supervised department secretaries by overseeing performance, making revisions, and ensuring administrative tasks are executed effectively.
- Created and managed comprehensive databases for internal and external purposes to ensure efficient record-keeping.
- Organised archives and implemented a systematic numbering system to facilitate document retrieval.
- Recorded detailed minutes during major organisational meetings.
- Utilised tools such as Microsoft Word, Excel, PowerPoint, Canva, Google Docs, and Google Sheets to perform administrative tasks professionally.

Netdev - **Telkom University, Indonesia**   Jan 2025 - May 2025

Mentor

A class provided by Adaptive Network Laboratory for Telkom University students. Training for knowledge about core network and preparing mentee as a researcher.

- Prepared comprehensive teaching materials, ensuring that content was relevant, clear, and aligned with learning objectives at SDN course.
- Designed and implemented assessments, reinforcing learning and measuring participant comprehension.
- Delivered engaging and informative lessons, effectively conveying complex topics to ensure participant understanding and skill development.

NetSchool - **Telkom University, Indonesia**   Nov 2024 - Present

Mentor

A class provided by Adaptive Network Laboratory for Telkom University students to learn Networking, Linux, and Python.

- Prepared comprehensive teaching materials, ensuring that content was relevant, clear, and aligned with learning objectives.
- Designed and implemented quizzes as post-activity assessments, reinforcing learning and measuring participant comprehension.
- Delivered engaging and informative lessons, effectively conveying complex topics to ensure participant understanding and skill development.
- Analyzed quiz results and assignments to assess participants' progress, providing constructive feedback to support their ongoing improvement and skill enhancement.

Skills

- **Soft Skills**: Public Speaking, Problem Solving, Critical Thinking, Emotional Intelligence, Creativity,Time Management, Dicipline, Innovative, Team Work, Leadership, Communicative, Accountable
- **Programming & Development**: Python (Advanced), C, Vue.js, SQL, Bash Scripting.
- **Network & Simulation**: Mininet, Ryu Controller, Cisco Packet Tracer, Wireshark, Kubernetes, Docker.
- **Data Science & AI**: PyTorch, TensorFlow (Basic), Hadoop, Pandas, NumPy, Tableau, LSTM Networks.
- **Tools**: LaTeX, Git, Linux (Ubuntu), Figma.