# CURRICULUM VITAE – DR BEN RAHMAN

## PROFILE

Ben Rahman received his Bachelor's degree in Information Systems from Universitas Bina Nusantara in 2012, followed by a Master's degree in Information Systems from the same institution in 2017. He completed his Ph.D. in Computer Science at Universitas Bina Nusantara in 2024. Prior to entering academia, he gained extensive professional experience working across various international and multinational technology companies, and held engineering and leadership roles in several countries. Since September 1, 2018, he has served as a faculty member at Universitas Nasional, Indonesia, in the Faculty of Communication and Information Technology, specifically within the Information Systems program. As a practitioner, educator, and researcher, Dr. Rahman has contributed to the development of numerous web, mobile, and cloud-based applications. His research interests include Generative AI, Large Language Models (LLMs), reinforcement learning, and machine learning optimization. He has published multiple scientific papers in both national journals indexed by SINTA and international journals indexed by Scopus. Dr. Rahman is passionate about bridging theoretical research with real-world impact and is actively involved in developing AI-driven systems for education, productivity, and social inclusion.

## Personal Information

**Name:** Dr. H. Ben Rahman, B.Sc., S.Kom., MMSI

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**Location:** Jakarta, Indonesia

**IEEE Membership:** Pending Merge (Multiple past accounts)

## Educational Background

**Ph.D.** in Computer Science – Universitas Bina Nusantara, 2024

**MMSI** in Information Systems – Universitas Bina Nusantara, 2017

**S.Kom**. in Information Systems – Universitas Bina Nusantara, 2012

**B.Sc**. in Management Information Systems – AMIK YPTK Padang, 1987

## Professional Experience – 38+ Years in IT

**1987–1992**: Programmer & System Analyst – PT Semen Padang

**1992–1996**: IT Supervisor – Alcatel Cable

**1996–1998**: Head of IT Department – South Pacific Viscose (SPV)

**1998–2006**: Assistant IT Manager – International SOS

**2006–2018**: ICT Manager – Medika Plaza

**2024–Present**: Director of IT and Innovation – APPRODI

## Academic Positions

**Universitas Nasional** – Lecturer, 2018–Present

**Universitas Bakrie** – Lecturer, 2014–Present

**Politeknik Negeri Jakarta** – Lecturer, 2017–2019

**Sekolah Tinggi Teknologi Jakarta** – Lecturer, 2017–2019

## Selected Publications (WoS, Scopus, arXiv, TechRxiv)

[1]. Rahman, B. et al. **"Optimizing Customer Satisfaction Through Sentiment Analysis: A BERT-Based Machine Learning Approach to Extract Insights." IEEE Access,** vol. 12, pp. 151476-151489, 2024. DOI: 10.1109/ACCESS.2024.3478835
https://ieeexplore.ieee.org/document/10714245

[2]. Rahman, B. et al. **"Context-Aware Semantic Segmentation: Enhancing Pixel-Level Understanding with Large Language Models for Advanced Vision Applications." arXiv:**2503.19276, 2024.  https://arxiv.org/abs/2503.19276

[3]. Rahman, B. et al. **"Optimizing Plant Watering Efficiency via IoT: Fuzzy Sugeno Method with ESP8266 Microcontroller." TEM Journal,** 13(3), 1849–1857, 2024.
https://www.ceeol.com/search/article-detail?id=1260391

[4]. Rahman, B. et al. **"Electrocardiogram Abnormal Detection Model Using Machine Learning Approach." ICIC Express Letters Part B**, 14(8), 779-786, 2023.
http://www.icicelb.org/ellb/contents/2023/8/elb-14-08-01.pdf ;
https://scholar.ui.ac.id/en/publications/electrocardiogram-abnormal-detection-model-using-machine-learning

[5]. Rahman, B., **"PPO-BR: Dual-Signal Entropy-Reward Adaptation for Trust Region Policy Optimization." Version 1, TechRxiv** Preprint, expected May 2025.

https://www.techrxiv.org//1297894

[6]. Rahman, B. et al. **"PPO-BR: Proximal Policy Optimization with Bias Rectification for Reinforcement Learning in Noisy Feedback Environments."** Version 2, **arXiv preprint**, May 2025. [arXiv:2505.17714v1], https://arxiv.org/abs/2505.17714

**[5]&[6]** - Currently under review at **IEEE Transactions on Neural Networks and Learning Systems (IEEE TNNLS)**.

[7]. Rahman, B., "**HOT-FIT-BR: A Context-Aware Evaluation Framework for Digital Health Systems in Resource-Limited Settings**," *arXiv preprint arXiv:2505.20585*, 2025. [Online]. Available: https://arxiv.org/abs/2505.20585

## Notable Contributions

**Chairman of IKA DCS (2025–2028)** – AI-driven alumni collaboration

**Director of IT and Innovation at APPRODI** – Driving national tech-productivity ecosystem

**Pioneer of PPO-BR and TATAP AI** – RL Stability & Assistive AI for humanity

**Author of 8+ peer-reviewed** international publications (Q1–Q3)

**Reviewer & Research Mentor** – IEEE, Hibah Dikti, and AI books

## Books and Training

**Master Produktivitas Nasional** – 2025

**R Programming for AI & Data Science** – 2025

**100+** sessions in SQL Server, C#, .NET, AI, Smart System Development

## Professional Impact Summary

With over **38 years** of cross-sector and international experience (**including roles in Singapore, Vietnam, and Russia**), I bridge the gap between cutting-edge AI innovation and real-world deployment, empowering inclusive communities, enhancing national productivity, and leading academic and industrial transformation in Indonesia.

## Keynote & Invited Speaking Engagements

Dr. Ben Rahman has been **actively invited as a keynote speaker in national and international events**, reflecting his leadership and influence in emerging technologies and AI.

- Keynote Speaker – **International Symposium on "Recent Trends on Emerging Technology 4.0"**, 22–23 November 2024
- (Delivered opening keynote on **Agentic AI and Productivity-Driven Innovation**)
- **Featured Speaker in numerous national** seminars, research bootcamps, and technology forums
- **Delivered talks** both in-person and virtually via platforms such as Zoom, Webex, and MS Teams, reaching diverse audiences across Indonesia, Southeast Asia, and beyond
- **Focus** areas include:
  - **Agentic AI and LLM-based Systems**
  - **Digital Transformation for Inclusive Productivity**
  - **Building Research Legacy & Academic Impact in Global Stage**

His ability to communicate complex AI concepts in accessible, impactful ways has made him a sought-after speaker by universities, professional associations, and policy-oriented institutions.