# RIFQIIKHWANUDDIN

Head of Sustainable & Intelligent Built-Environment Lab rifgi.ikhwanuddin@tf.itera.ac.id

Assistant Professor at Engineering Physics • (February 2018 – Now)
Department of Electrical, Informatics, and Physical System Engineering
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# **FDUCATION**

#### **INSTITUT TEKNOLOGI BANDUNG**

CGPA 3.92 / 4.00 • CUM LAUDE

M.Sc (or M.T.) IN ENGINEERING PHYSICS

Jan 2016 - Mar 2018 • Bandung, Indonesia

Master's Thesis: Simulation for Sonic Environment of University Library based on First Order Ambisonic Record-

ing in Soundscape Context [URL]

## UNIVERSITAS GADJAH MADA

CGPA 3.40 / 4.00 • HIGH MERIT

B.Eng (or S.T.) in Engineering Physics

Aug 2009 – Aug 2014 • Yogyakarta, Indonesia

Undergraduate Thesis: Analysis of Dome Geometry Effect on Acoustic Conditions of AR Fachruddin UMM

Mosque by using CATT-Acoustic

# RESEARCH INTEREST

Soundscape, Sustainable Built-Environment, Bioacoustics, Audio Signal Processing, & Machine Learning

# **SKILLS**

PROGRAMMING

Python, LTFX, C++, Markdown, Javascript, HTML, PHP, CSS, MySQL

ENGLISH PROFICIENCY

IELTS Academic 7.5

**SOFTWARE** 

MATLAB, Audacity, Adobe Audition, Reaper, Plogue Bidule, OSCulator, COMSOL

Multiphysics, CATT-Acoustics, Final Cut Pro, DIALux EVO

# SELECTED PUBLICATIONS

- [1] Iva Rofiatun Nisa Azzahra, Joko Sarwono, Iwan Prasetiyo, Anugrah Sabdono, Randy Frans Fela, Sentagi Sesotya Utami, and Rifqi Ikhwanuddin. Hospital Soundscapes: Soundscapes Interventions in Intensive Care Unit. In 25th International Conference on Sound and Vibration, 2018.
- [2] Sentagi Sesotya Utami, Randy Frans Fela, Joko Sarwono, and Rifqi Ikhwanuddin. Acoustics Survey to Predict Occupants' Preferences of A Library. In 25th International Conference on Sound and Vibration, 2018.
- [3] Angga Dwi Firmanto, Ivan Stefanus, Rifqi Ikhwanuddin, and Miranti Indar Mandasari. Design of Speech Forensic Database in Developing Automatic Recognition System based on Indonesia Language. In *Seminar Nasional Sistem*, *Instrumentasi*, *dan Kontrol (SIK)* 2017, pages 97–104, 2017.
- [4] Rifqi Ikhwanuddin, Joko Sarwono, Anugrah Sabdono Sudarsono, and Sentagi Sesotya Utami. Library Soundscape: Higher Education Students' Perception. In *INTER-NOISE and NOISE-CON Congress and Conference Proceedings*, volume 255 of 4, pages 3875–3881. Institute of Noise Control Engineering, 2017.
- [5] Rifqi Ikhwanuddin, Randy Frans Fela, and Sentagi Sesotya Utami. Analysis of Dome Geometry Effect on Acoustics Conditions of A.R. Fachruddin Mosque UMM using CATT-Acoustic. In *The 5th International Conference on Mathematics and Natural Sciences*, 2014.

# AWARDS & GRANTS

#### **DOCTORAL BRIDGING COURSE**

Nov 2021 – Feb 2022 • NUI Galway, Ireland

Awarded Doctoral Bridging Course funded by Ministry of Education, Culture, Research, and Technology Indonesia (approximately £11,100)

Research Grant on Red Brick as Sustainable Materials funded by Ministry of Education, Culture, Research, and Technology Indonesia (approximately £1,100)

### SIMLITABMAS YOUNG RESEARCHER GRANT

Mar - Des 2019 • Indonesia

Research Grant on Implementing HTML5 WebAudio on Soundscape Reproduction funded by Ministry of Education, Culture, Research, and Technology Indonesia (approximately £1,000)

#### **SMART ITERA RESEARCH GRANT**

Mar – Des 2018 • Indonesia

Research Grant on Sustainable Materials funded by Institut Teknologi Sumatera (approximately £1,230)

#### **CUM LAUDE: GRADUATING WITH HONORS**

Apr 2018 • Bandung, Indonesia

Awarded by Institut Teknologi Bandung (CGPA 3.92/4.00)

#### MASTER'S DEGREE SCHOLARSHIP

Jun 2015 ● Indonesia

Awarded by Indonesia Endownment Fund for Education (Lembaga Pengelola Dana Pendidikan, LPDP) Ministry of Finance Indonesia (approximately £7,000)

#### UNDERGRADUATE DEGREE SCHOLARSHIP

Aug 2009 - Aug 2013 • Indonesia

Awarded by Budi Mulia Islamic Boarding School, Shalahuddin Foundation (approximately £1,400)

# PROJECT EXPERIENCES\*

#### SUSTAINABLE & INTELLIGENT BUILT-ENVIRONMENT ITERA

2021 • Lampung, Indonesia

**COMMUNITY SERVICE** GCP (Google Cloud Platform) Workshop for School Teachers

**COMMUNITY SERVICE** Google Classroom Workshop for School Teachers

**COMMUNITY SERVICE** Improving Live and Sound Recording at Mosque Ad-Du'a

2020 • Lampung, Indonesia

**RESEARCH** Animal Identification by Extracting MFCC Audio Feature and Machine Learning **COMMUNITY SERVICE** Evaluating Room Acoustics for Worship Building at Mosque Al-Huda

RESEARCH Soundscape Tools for Assessing Sonic Environment using WebAudio API 2019 ● Lampung, Indonesia

RESEARCH Sustainable Building Material: Modifying Composition of Traditional Red Brick with Waste Banner

2018 • Lampung, Indonesia

**COMMUNITY SERVICE** Building a Web Database for The Provincial Government of DKI Jakarta, Indonesia

#### **ACOUSTICS & BUILDING PHYSICS LAB ITB**

2017 • Bandung, Indonesia

**RESEARCH** Designing Sound Reinforcement System for National Sports Week XIX West Java

**COMMUNITY SERVICE** Evaluating Room Acoustics at Masjid Darussalam Kota Wisata Cibubur, West Java

**COMMUNITY SERVICE** Sound Reinforcement System for ITB Jazz Concert

**COMMUNITY SERVICE** Sound Reinforcement System for ITB Jazz Concert

2016 • Bandung, Indonesia

#### ACOUSTICS RESEARCH CENTER UGM

2014 • Malang, Indonesia

**RESEARCH** Evaluating Room Acoustics for Worship Building at Masjid AR. Fachruddin UMM, East Java

**RESEARCH** Evaluating Sound Reinforcement System at Multi-Purpose Hall Grha Sabha Pramana UGM, DIY

## PROFESSIONAL MEMBERSHIP

2019 – now Green Associate (GA) in Green Building Council Indonesia (GBCI)

2020 – 2021 Young Engineer in Badan Keahlian Teknik Fisika Persatuan Insinyur Indonesia (BKTF PII)

2020 – 2021 Audio Engineering Society (AES)

2019 – 2021 Indonesian Acoustics and Vibration Association

2016 - 2019 Institute of Acoustics (IoA)

## REFERENCES

Ir. R. S. **Joko Sarwono**, S.T., M.T., Ph.D jsarwono@tf.itb.ac.id Master's thesis supervisor Associate Professor in Engineering Physics Institut Teknologi Bandung (ITB) Ir. **Sentagi Sesotya Utami**, S.T., M.Sc., Ph.D sentagi@ugm.ac.id

Undergraduate thesis supervisor Associate Professor in Engineering Physics

Universitas Gadjah Mada (UGM)