

Nomor: 200012021000191

menyatakan bahwa

Muhammad Ibnu Choldun Rachmatullah

lahir pada tanggal 18 Juli 1971 di Sukoharjo

dengan Nomor Induk Kependudukan 3273081807710001

diterima pada Semester 2 Tahun Akademik 2017/2018

dengan Nomor Induk Mahasiswa 33217301

telah menyelesaikan studi dan memenuhi segala syarat pendidikan Doktor

pada Program Studi

Teknik Elektro dan Informatika

pada tanggal 27 Juli 2021

dengan judul disertasi

Pendekatan dalam Penentuan Topologi Multi-Layer Perceptron dengan Analisis Komponen Utama dan Pengklasteran

Oleh sebab itu, kepadanya diberikan gelar

Doktor (Dr.) dengan Predikat Cum Laude

beserta segala hak dan kewajiban yang melekat pada gelar tersebut.

Diberikan di Bandung pada tanggal 23 Oktober 2021.



Dekan

Sekolah Teknik Elektro dan Informatika,

Dekan

Sekolah Pascasarjana,

Rektor,

Dr. Tutun Juhana, S.T., M.T.

NIP 196902121997021001

Prof. Dr. Suprijadi, M.Eng.

NIP 196707111993031001

Prof. Reini Wirahadikusumah, Ph.D.

NIP 196810251992032001

Ijazah ini diberikan berdasarkan Surat Keputusan Rektor Nomor: 924/IT1.A/SK/DA.06/2021

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Ijazah ini dapat diverifikasi di <https://akademik.itb.ac.id/alumni>

Number: 200012021000191

herewith certifies that

Muhammad Ibnu Choldun Rachmatullah

born in Sukoharjo on July 18, 1971

with Resident Identification Number 3273081807710001

admitted in the Second Semester of Academic Year 2017/2018

with Student Registration Number 33217301

has successfully fulfilled all the requirements of the Doctoral Program in

Electrical Engineering and Informatics

on July 27, 2021

with dissertation title

An Approach in Determining The Topology of Multi-Layer Perceptron Using Principal Component Analysis and Clustering

and therefore has been granted the degree of

Doctor of Philosophy (Cum Laude)

with all the rights and responsibilities belonging to that degree.

Awarded in Bandung on October 23, 2021.



Dean of

School of Electrical Engineering and Informatics,

Dr. Tutun Juhana, S.T., M.T.
NIP 196902121997021001

Dean of

Graduate School,

Prof. Dr. Suprijadi, M.Eng.
NIP 196707111993031001



Rector,

Prof. Reini Wirahadikusumah, Ph.D.
NIP 196810251992032001

This certificate is issued based on the Decree of the Rector No: 924/IT1.A/SK/DA.06/2021

Institut Teknologi Bandung is accredited "A" based on the Decree of BAN-PT No: 5234/SK/BAN-PT/Akred/PT/XII/2017

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INSTITUT TEKNOLOGI BANDUNG

SEKOLAH TEKNIK ELEKTRO DAN INFORMATIKA

Jalan Ganesha 10 Bandung 40132 Telp. (022) 2502260, (022) 4254028 Fax. (022) 2534222

TRANSKRIP AKADEMIK

No: 332001/IT1.C12/DA.07/X/TRS/2021

Nama : Muhammad Ibnu Choldun Rachmatullah
NIM : 33217301
Tempat, Tanggal Lahir : Sukoharjo, 18 Juli 1971
Tahun Masuk ITB : 2017/2018 Semester 2
Fakultas/Sekolah : Sekolah Teknik Elektro dan Informatika
Program Studi : Doktor Teknik Elektro dan Informatika
Gelar : Doktor (Dr.)
No Ijazah : 200012021000191



Kode	Mata Kuliah	SKS	Nilai
EI7090-13	Filsafat Ilmu Pengetahuan	2	A
EI7094-13	Metodologi Penelitian	3	A
EI7095-13	Ujian Kualifikasi	3	P
EI7091-13	Teknik Elektro dan Informatika Lanjut	6	A
EI7096-13	Penyusunan Proposal	5	P
EI7098-13	Penelitian & Seminar Kemajuan I	5	P
EI8095-13	Penelitian & Seminar Kemajuan II	5	P
EI8098-19	Penelitian & Seminar Kemajuan III	5	A
EI9095-19	Penelitian & Seminar Kemajuan IV	5	A
EI9099-19	Ujian Disertasi	3	A

A (4): Sangat baik, AB (3,5): Antara baik dan sangat baik, B (3): Baik, BC (2,5): Antara baik dan cukup, C (2): Cukup, P: Pass/Lulus.

Indeks Prestasi (IP) : 4,00 SKS : 42
Lulus tanggal : 27 Juli 2021 Predikat : Cum Laude
Judul Disertasi : Pendekatan dalam Penentuan Topologi Multi-Layer Perceptron dengan Analisis Komponen Utama dan Pengklasteran

Bandung, 23 Oktober 2021

Dekan



Dr. Tutun Juhana, S.T., M.T.
NIP 196902121997021001



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ACADEMIC TRANSCRIPT

Number: 332001/IT1.C12/DA.07/X/TRS/2021

Name : Muhammad Ibnu Choldun Rachmatullah
Student Reg. Num. : 33217301
Place, Date of Birth : Sukoharjo, July 18, 1971
Admission Year : 2017/2018 on Semester 2
Faculty/School : School of Electrical Engineering and Informatics
Study Program : Doctor of Electrical Engineering and Informatics
Degree : Doctor of Philosophy
Certificate Num. : 200012021000191



Code	Course	Units	Grade
EI7090-13	Philosophy of Science	2	A
EI7094-13	Methods of Research	3	A
EI7095-13	Qualifying Exam	3	P
EI7091-13	Advanced Electrical Engineering & Informatics	6	A
EI7096-13	Research Proposal	5	P
EI7098-13	Research & Seminar I	5	P
EI8095-13	Research & Seminar II	5	P
EI8098-19	Research & Progress Seminar III	5	A
EI9095-19	Research & Progress Seminar IV	5	A
EI9099-19	Disertation Examination	3	A

A (4): Exceptional, AB (3.5): Excellent, B (3): Good, BC (2.5): Satisfactory, C (2): Sufficient, P: Pass.

Grade Point Average : 4.00 Units : 42
Completion Date : July 27, 2021 Judicium : Cum Laude
Research Title : An Approach in Determining The Topology of Multi-Layer Perceptron Using Principal Component Analysis and Clustering

Bandung, October 23, 2021

Dean



Dr. Tutun Juhana, S.T., M.T.
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