

# CURRICULUM VITAE

## contact biography

### Narotama University

(Universitas Narotama)  
Jl. Arif Rahman Hakim 51,  
Surabaya City, East Java,  
Indonesia

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## languages

Indonesian

English

## research interests

Data Mining & Machine Learning,  
Data Warehouse & Business Int.,  
Artificial Int. & Metaheuristic Alg.,  
Big Data and Web Technology



He graduated with an Applied Bachelor of Information Technology degree in Informatics Engineering Study Program in 2015 and graduated with an Applied Master's Degree in Informatics and Computer Engineering Study Program in 2017 from Electronic Engineering Polytechnic Institute of Surabaya (*Politeknik Elektronika Negeri Surabaya*), Indonesia. He is currently working at the Narotama University as a young lecturer in informatics engineering since 2018. His research interests including in data mining and machine learning, data warehouse and business intelligence, artificial intelligence and metaheuristic algorithm, big data and web technology.

## education

2015–2017  
(GPA=3.76)

**Cum Laude**

### Applied Master Program

Study Program of Informatics and Computer Engineering,  
Electronic Engineering Polytechnic Institute of Surabaya,  
East Java, Indonesia

**Thesis:** “No Evidence of Disease (NED)–Breast Cancer Patient Based on Classification using Decision Tree Algorithm”

**Supervised by** Iwan Syarif, S.Kom, M.Kom, M.Sc, Ph.D and Aliridho Barakbah, S.Kom, Ph.D

2011–2015  
(GPA=3.56)

**Cum Laude**

### Applied Bachelor Program

Study Program of Informatics Engineering,  
Electronic Engineering Polytechnic Institute of Surabaya,  
East Java, Indonesia

**Undergraduate Thesis:** “Developing Management Information System for Administration Services in East Java Provincial Police Security Intelligence Directorate”

**Supervised by** Wiratmoko Yuwono, S.T, M.T and Ferry Astika Saputra, S.T, M.Sc

2008–2011

### Senior High School

SMA Nahdlatul Ulama 1 Gresik, East Java, Indonesia

2005–2008

### Junior High School

SMP Nahdlatul Ulama 1 Gresik, East Java, Indonesia

1999–2005

### Elementary School

MINU Sukodono Gresik, East Java, Indonesia

## teaching courses

2019	<b>Metaheuristic Algorithm Courses</b>	at Narotama University
	Date (from-to)	September 2019–January 2020
	Semester and Class	Sem. 7 / Class A
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2019	<b>Data Warehouse and Business Intelligent Courses</b>	at Narotama University
	Date (from-to)	September 2019–January 2020
	Semester and Class	Sem. 7 / Class A, B
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2019	<b>Information and Communication Technology Courses</b> (general courses)	at Narotama University
	Date (from-to)	September 2019–January 2020
	Semester and Class	Sem. 1 / Class A, B
	Study Program	Informatics Engineering, Information System, and Computer System
	Faculty	Faculty of Computer Science
2019	<b>Data Mining and Machine Learning Courses</b>	at Narotama University
	Date (from-to)	March 2019–August 2019
	Semester and Class	Sem. 6 / Class A, B
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2019	<b>Big Data Courses</b>	at Narotama University
	Date (from-to)	March 2019–August 2019
	Semester and Class	Sem. 6 / Class A, B
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2018	<b>Metaheuristic Algorithm Courses</b>	at Narotama University
	Date (from-to)	September 2018–January 2019
	Semester and Class	Sem. 7 / Class B, C
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2018	<b>Cloud Computing Courses</b>	at Narotama University
	Date (from-to)	September 2018–January 2019

	Semester and Class	Sem. 7 / Class A, B
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2018	<b>Data Warehouse and Business Intelligent Courses</b>	at Narotama University
	Date (from-to)	September 2018–January 2019
	Semester and Class	Sem. 7 / Class A
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2018	<b>Information and Communication Technology Courses</b> (general courses)	at Narotama University
	Date (from-to)	September 2018–January 2019
	Semester and Class	Sem. 1 / Class A
	Study Program	Civil Engineering
	Faculty	Faculty of Engineering
2018	<b>Data Warehouse Courses</b>	at Narotama University
	Date (from-to)	March 2018–August 2018
	Semester and Class	Sem. 6 / Class A, B, C
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science
2018	<b>Computer Animation Courses</b>	at Narotama University
	Date (from-to)	March 2018–August 2018
	Semester and Class	Sem. 6 / Class C
	Study Program	Informatics Engineering
	Faculty	Faculty of Computer Science

## supervised students for undergraduate thesis

2019–now	<b>Research Topic</b>	at Narotama University
	Klasifikasi Status Gizi Anak Usia Dini Berdasarkan Indeks Anthropometri Menggunakan Metode Gaussian Naïve Bayes	
	(in English: Classification of Early Childhood Nutrition Status Based on Anthropometric Index Using the Gaussian Naïve Bayes Method)	
	<b>Supervised Student</b>	
	Much. Afif Masykur Mughni	

- 2019–now **Research Topic** at Narotama University  
 Implementasi GIS dan Klasterisasi Potensi Pendonor Darah Tetap dengan Metode Agglomerative Hierarchical Clustering  
*(in English: Implementation of Geographical Information System (GIS) and Clusterization of the Fixed Potential Blood Donors using Agglomerative Hierarchical Clustering Methods)*  
**Supervised Student**  
 Pratama Ryan Harnanda
- 2019–now **Research Topic** at Narotama University  
 Analisis Forecasting Penjualan Mobil Mitsubishi Menggunakan Metode Exponential Smoothing dan Least Square  
*(in English: Forecasting Analysis of Mitsubishi Car Sales using Exponential Smoothing and Least Square Method)*  
**Supervised Student**  
 Rysda Putra Ambariawan
- 2019–now **Research Topic** at Narotama University  
 Analisis dan Klasterisasi Sentimen Pengguna Twitter Terkait Penolakan RUU KUHP Menggunakan Metode Agglomerative Hierarchical Clustering  
*(in English: Analysis and Clustering of Twitter User Sentiments Regarding Rejection of the Criminal Code Bill using Agglomerative Hierarchical Clustering Method)*  
**Supervised Student**  
 Nur Restu Prayoga
- 2019–now **Research Topic** at Narotama University  
 Klasifikasi Penyakit Jantung Berdasarkan Faktor Risiko Menggunakan Metode Fisher's Discriminant Ratio dan Backpropagation  
*(in English: Classification of Heart Disease Based on Risk Factors Using Fisher's Discriminant Ratio and Backpropagation Methods)*  
**Supervised Student**  
 Muh, Dimas Yudianto
- 2018–2019 **Research Topic** at Narotama University  
 Prediksi Siklus Estrus Sapi Perah untuk Perencanaan Inseminasi Buatan Menggunakan Artificial Neural Networks  
*(in English: Prediction of Estrus Cycle in Dairy Cattle for Artificial Insemination Planning Using Artificial Neural Networks)*

- Supervised Student**  
Randy Anwar Romadhonny
- 2018–2019 **Research Topic** at Narotama University  
Klasifikasi Suara Tangisan Bayi Berdasarkan Prosodic Features Menggunakan Metode K-Nearest Neighbor  
(**in English:** Infant Cry Classification based on Prosodic Features using K-Nearest Neighbor)
- Supervised Student**  
Aditya Singgi Prayogi
- 2018–2019 **Research Topic** at Narotama University  
Klasterisasi Jumlah Penumpang Kereta Api di Indonesia Menggunakan Metode K-means  
(**in English:** Clustering the Number of Train Passengers in Indonesia Using K-means)
- Supervised Student**  
Benny Wijaya
- 2018–2019 **Research Topic** at Narotama University  
Analisis Sentimen Pengguna Twitter Terhadap Topik Sepak Bola Indonesia dengan Metode K-Nearest Neighbor  
(**in English:** Twitter User Sentiment Analysis of Indonesian Football Topics with the K-Nearest Neighbor)
- Supervised Student**  
Jeremy Andre Septian
- 2018–2019 **Research Topic** at Narotama University  
Analisis Penyerang Terbaik Liga Inggris dengan K-means Clustering dan Metode TOPSIS  
(**in English:** Analysis of the Premier League's Best Strikers with K-means Clustering and TOPSIS)
- Supervised Student**  
Alif Sefty Wiyantoro
- 2018–2019 **Research Topic** at Narotama University  
Sistem Penunjang Keputusan Beasiswa untuk Siswa Miskin di SMK Darma Siswa 1 Sidoarjo Menggunakan Metode AHP dan SAW  
(**in English:** Scholarship Decision Support System for Poor Students at Vocational High School of Darma Siswa 1 Sidoarjo Using AHP and SAW)
- Supervised Student**  
Muhammad Hamzah Romadhon

## examine a research proposal for undergraduate thesis

- 2019      **Research Proposal Title** at Narotama University  
Sistem Pendukung Keputusan untuk Menentukan Pemberian Tunjangan Bagi Tenaga Pendidik dan Kependidikan Berbasis Tahani Fuzzy Logic Model  
(**in English:** Decision Support System to Determine the Allowance for Teachers and Education Staff Based on Fuzzy Logic Tahani Models)  
**Student Presenter**  
M. Asrori
- 2019      **Research Proposal Title** at Narotama University  
Sistem Pendukung Keputusan untuk Menentukan Nilai Kredit Pinjaman dengan Fuzzy Logic Model Tsukamoto (Studi Kasus: Koperasi Serba Usaha Artha Mandiri Sidoarjo)  
(**in English:** Decision Support System to Determine Loan Credit Value with Tsukamoto Fuzzy Logic Model (Case Study: Cooperative of Serba Usaha Artha Mandiri Sidoarjo))  
**Student Presenter**  
Farid Rizaldi
- 2019      **Research Proposal Title** at Narotama University  
Pengenalan Hurus Aksara Lontara dengan Menggunakan Metode Naïve Bayes  
(**in English:** Handwritten Lontara Character Recognition using Naïve Bayes)  
**Student Presenter**  
Eki Febrian Muslifah
- 2019      **Research Proposal Title** at Narotama University  
Pengenalan Bahasa Isyarat Indonesia Statis Menggunakan Metode Principal Component Analysis dan Hebb-Rule  
(**in English:** Static Indonesian Sign Language Recognition Using Principal Component Analysis and Hebb-Rule Method)  
**Student Presenter**  
Dwi Setiawan
- 2019      **Research Proposal Title** at Narotama University  
Implementasi Data Mining untuk Pemilihan Menu di Kafe Kopiganes Sebagai Strategi Penjualan dengan Menggunakan Metode Association Rule

- (in English: Implementation of Data Mining for Menu Selection at Kopiganes Cafe as a Sales Strategy using Association Rule Method)  
**Student Presenter**  
 Mohammad Umar Mochtar
- 2019 **Research Proposal Title** at Narotama University  
 Sistem Informasi Laboratorium Teknik Informatika Universitas Narotama  
 (in English: Laboratory Information System for Informatics Engineering at Narotama University)  
**Student Presenter**  
 Aneesa Madeng
- 2019 **Research Proposal Title** at Narotama University  
 Aplikasi Imunisasi Bayi Berbasis Web (Studi Kasus: Posyandu Kenjeran Surabaya)  
 (in English: Web-Based Baby Immunization Application (Case Study: Integrated Service Post at Kenjeran Surabaya))  
**Student Presenter**  
 Armilah Dimadi
- 2019 **Research Proposal Title** at Narotama University  
 Penerapan Metode Naïve Bayes untuk Analisis Sentimen Terhadap Layanan Jasa Maskapai Penerbangan Pada Twitter  
 (in English: Implementation of the Naïve Bayes Method for Sentiment Analysis of Airlines Services on Twitter Data)  
**Student Presenter**  
 Moh. Yasid
- 2018 **Research Proposal Title** at Narotama University  
 Desain dan Kendali CNC plotter 2D Portable Menggunakan Arduino R3 dan Android  
 (in English: Design and Control of CNC plotter 2D Portable using Arduino R3 and Android)  
**Student Presenter**  
 Muhammad Habibi
- 2018 **Research Proposal Title** at Narotama University  
 Permainan Interaktif "Ice Cream" Menggunakan Unity 3D dan Metode Agent-based Modelling  
 (in English: Interactive Game "Ice Cream" Using Unity 3D and Agent-based Modeling Method)  
**Student Presenter**  
 Wahyu Putra Adi Setiawan

2018 **Research Proposal Title** at Narotama University  
Prediksi Siklus Estrus Sapi Perah untuk Perencanaan  
Inseminasi Buatan Menggunakan Artificial Neural  
Networks  
(in English: Prediction of Estrus Cycle in Dairy Cattle for Artificial  
Insemination Planning Using Artificial Neural Networks)  
**Student Presenter**  
Randy Anwar Romadhonny

## community services program

2019 **Trainer** at Basecamp Syameer Technology  
Presenting Data Science Training for Industry Needs  
(PT.PJB Surabaya staff) supported by Researchsoft and  
Syamerr Technology

2019 **Presenter** at Junior High School 43 Surabaya  
Presenting Internet Health and Law on Information and  
Electronic Transactions in Indonesia at Junior High School  
43 Surabaya Student

2019 **Program Initiator** at Gresik (city) Resort Police  
Program Initiator of Optimizing the Use of Wordpress for  
Information Systems Services Police Certificate Statement  
at Gresik (city) Resort Police

2019 **Supervised Student Study Service**  
at State Junior High School 17 Surabaya  
Guiding Student Study Service (**Indonesian:** Kuliah Kerja  
Nyata) of Narotama University Student with State Junior  
High School 17 Surabaya Student

### **Activity Entitled**

“Training of Microsoft Office (Ms.Word, Ms. Excel, and  
Ms. PowerPoint) at State Junior High School 17 Surabaya  
Student ”

2018 **Supervised Student Study Service**  
at Junior High School of Kartika IV-11 Surabaya  
Guiding Student Study Service (**Indonesian:** Kuliah Kerja  
Nyata) of Narotama University Student with Junior High  
School of Kartika IV-11 Surabaya Student

### **Activity Entitled**



“Introducing Computers and Basic Java Programming Training at Junior High School of Kartika IV-11 Surabaya Student”

2018 **Presenter** at Junior High School 43 Surabaya  
Presenting Internet Health and Law on Information and Electronic Transactions in Indonesia at Junior High School 43 Surabaya Student

## internship program

2019 **Supervised Student Internship Program**  
at PT. Vascomm Solusi Teknologi  
Guiding internship program (**Indonesian:** Program Magang) of Narotama University Student at PT. Vascomm Solusi Teknologi

### **Project Entitled**

“Development of an Automatic-Testing for Web Development at PT. Vascomm Solusi Teknologi”

### **Student Participant**

Dali Kewara

2019 **Supervised Student Internship Program**  
at PT. Nova Production  
Guiding internship program (**Indonesian:** Program Magang) of Narotama University Student at PT. Nova Production

### **Project Entitled**

“Development of a Web-based Information System for Company Profile at PT. Nova Production”

### **Student Participant**

Wahyu Putra Adi Setiawan

2018 **Supervised Student Internship Program**  
at PT. Piramida Teknologi Informasi  
Guiding internship program (**Indonesian:** Program Magang) of Narotama University Student at PT. Piramida Teknologi Informasi

### **Project Entitled**

“Development of a Web-based Information System for Final Project Monitoring (Case Study: Institut Teknologi Adhi Tama Surabaya)”

### **Student Participant**

Moh. Yasid

2018

### **Supervised Student Internship Program**

at PT. Piramida Teknologi Informasi

Guiding internship program (**Indonesian:** Program Magang) of Narotama University Student at PT. Piramida Teknologi Informasi

### **Project Entitled**

“Analysis and Design of a Web-based Information System for Final Project Monitoring (Case Study: Narotama University)”

### **Student Participant**

Sancaka Prana Wisesa

2018

### **Supervised Student Internship Program**

at PT. BMC Logistik (Berkah Multi Cargo)

Guiding internship program (**Indonesian:** Program Magang) of Narotama University Student at PT. BMC Logistik (Berkah Multi Cargo)

### **Project Entitled**

“Development of a Web-based Information System and PostgreSQL Database for IT Inventory at PT. BMC Logistik (Berkah Multi Cargo)”

### **Student Participant**

Muh. Dimas Yudianto

## **training and workshop (as a participant)**

2019

### **Machine Learning Workshop** at 17 August 1945 Surabaya University

Workshop of Machine Learning and Deep Learning: The Fundamentals

2019

### **Scientific Writing Workshop**

at Narotama University

Workshop of International Publications Q1 and Q2

at JW Marriott Hotel Surabaya

2019

### **Artificial Intelligence and Computer Vision Workshop**

Workshop of Intel Vision Technology and Open VINO Toolkit Workshop), presented by Intel

at Meeting room Cendana Premiere Hotel Surabaya

- 2019 **Data Science Workshop**  
Workshop of Data Science (topics: Descriptive Statistic and Exploratory Data Analysis), presented by Inixindo Surabaya
- 2019 **PEKER TI Workshop** at Airlangga University  
Workshop of Basic Skill Improvement Program for Instructional Technique (PEKER TI), presented by PIPS UNAIR
- 2018 **Data Science Workshop** at UNIPDU Jombang  
Workshop of Data Science Using Python and Its Job Opportunities in the Face of Industrial Revolutionary Era 4.0 (topics: Machine Learning and Text Mining), presented by Collaboration between UNIPDU Jombang, ITS, UI, and UNAIR
- 2018 **Patent Workshop** at Narotama University  
Patent Workshop: Overcoming the Challenges of Lecturer Research, presented by Institute of Research and Community Services (*Lembaga Penelitian dan Pengabdian Kepada Masyarakat*) of Narotama University
- 2018 **Competency-based Training Materials** at Narotama University  
Writing and Organizing a Competency-based Test-set Materials, presented by Professional Certification Institute (*Lembaga Sertifikasi Profesi*) of Narotama University
- 2018 **Training of Writing Textbook** at Narotama University  
Writing Course Textbooks for Lecturers in Relevant Fields, presented by Institute of Research and Community Services (*Lembaga Penelitian dan Pengabdian Kepada Masyarakat*) of Narotama University
- 2017 **Training of Proofreading English Articles**  
at Electronic Engineering Polytechnic Institute of Surabaya  
Proofreading a Writing of English Articles for Scientific Publications
- 2016 **Training of Web Design using Bootstrap**  
at Electronic Engineering Polytechnic Institute of Surabaya  
Developing a Responsive Web Design using Bootstrap to Make an Adaptive Screen Layout at ENUMERATION Program - Technology Community Workshop
- 2014 **Database** at Electronic Engineering Polytechnic Institute of Surabaya

- Oracle Introduction, Administration Workshop 1&2 Training
- 2013 **Mobile Apps** at Electronic Engineering Polytechnic Institute of Surabaya  
Phonegap Basic Training
- 2011 **Linux** at Electronic Engineering Polytechnic Institute of Surabaya  
Linux Fun (System Hacking) Training
- 2011 **Entrepreneur** at Electronic Engineering Polytechnic Institute of Surabaya  
Programmer be Entrepreneur Training
- 2011 **Web Apps** at Electronic Engineering Polytechnic Institute of Surabaya  
Web Design 2.0 HTML5–CSS3 Training
- 2011 **Microcontroller**  
at Electronic Engineering Polytechnic Institute of Surabaya  
Microcontroller Programming Training on the Line Tracer Robot AT Mega 8

## project experience

- 2018 **The Comparison of Prosodic Feature Selection of Human Emotional Voice using GA, PSO and ACO**  
An experiment that was done to select the emotional speech characteristic of human using Bio-Inspired Algorithm. The data was collected from the emotional speech of Toronto dataset which consists of 7 categories and each category has 200 samples. The dataset was extracted based on the prosodic feature using Sub-harmonic sampling algorithm, and then used Moments of Distribution to obtain the signal pattern of each emotional speech sample. We implemented the feature selection to obtain the important parameters using Bio-inspired algorithm such as Genetic Algorithm, Particle Swarm Optimization and Ant Colony Algorithm. – *Speech Recognition, Feature Extraction, Bio-Inspired Algorithm*
- 2018 **Iterative Grouping of Average: A New Algorithm for Missing Value Imputation**  
An experiment that was done to handle the missing values. Usually, missing values imputation using the common average formula on each continuous data column has a lack

which the resulting value does not vary. If the data variation for imputation is monotonous, the differences of characteristics on each data column will decrease. This will cause poor data modeling results, because machine learning assumes that the data characteristics of class X are similar to class Y. This algorithm is purpose to increase the precision of missing value imputation predictions can use a new algorithm, namely iterative grouping of average. – *Missing Value, Imputation, Data Mining*

2017 **Applied High-Performance Computing (HPC) and Parallel Processing Testing using Message Passing Interface (MPI) Protocol in PandaBoard Multi-node (Research Group)**

An application that was developed to provide high requirement environment using 32 nodes (PandaBoard) which has capability to solve parallel processing such as test a program to calculate prime numbers by utilizing HPC and MPI, and then compare the performance (the number of process and elapsed time) between PandaBoard 32 nodes and Laptop core i5. – *Linux, PandaBoard, Microcomputer*

2017 **Applied Big Data in Hadoop Multi-Node Linux Environment and Spark Machine Learning Library (Research Group)**

An application that was developed to build Big Data in Hadoop Multi-Node Linux Environment (connected to two or more nodes) and test a data using classification or clustering algorithm which is provided by Spark Machine Learning Library. – *Linux, Hadoop, Spark*

2016 **Applied Random Number Generator for Variable Independence Test using Chi-Square (Case Study: Breast Cancer Data)**

An application that was developed to simulate a modelling of Random Number Generator (RNG) from the variable of breast cancer case study (to variable independence test between age and cancer stage) which is tested into Chi-square method. – *Web Application, RNG, Chi-square*

- 2016 **Applied Search Engine for News using Text Mining**  
An application that was developed to build a search engine for news which has a text mining process include tokenizing, filtering, stemming-tagging, and analyzing. The system will receive all of the keywords from the user, and then process into text mining (to get important and basic words), and system output will be displayed the news ranking that contains keyword from user input. – *Web Application, Text Mining, News, Search Engine*
- 2016 **Applied Support Data Mining Tools using Rapidminer and Weka in Case Study**  
An implementation of data mining tools which is provided by Rapidminer and Weka to process the case study include solve missing values of data, SVM performance analysis study using 4 kernels (Linear, RBF, sigmoid, and Polynomial), find reliable algorithm for numeric and nominal data type, and outlier detection (Density and distance based). – *Desktop Application, Data Mining Tools, Library*
- 2016 **Applied Convolution Method for Noise Image Reduction**  
An application that was developed to solve image processing problem which has noise, because of the difference of high and low frequency. To remove the different point with the nearest point is needed noise reduction process using filtering. The Filter is applied in kernel form which is convoluted with the original image, the purpose is to improve image quality. – *Noise Image, Filtering, Matlab Programming*
- 2015 **Applied K-means Optimization using Genetic Algorithm**  
An application that was developed to optimize a clustering algorithm such as K-means which has a weakness, because of the clustering result with K-means is not unique (always changing), sometimes good or bad. Therefore, it needs Genetic Algorithm to optimize K-means. – *K-means, GA, Optimization, Java Programming*

- 2015 **Applied Neural Network Algorithm on Intelligent Computing and Application**  
An application that was developed to process numerical input and generate a conclusion output using several methods or algorithms include Single Perceptron, Multi Perceptron, Backpropagation, and Kohonen SOM. – *Web Application, Neural Network, Intelligent Computing*
- 2015 **Applied Recognition Application Based on Leaf Edge**  
An Android-based image processing application that was used to recognize the leaf from the leaf edge. – *Mobile Application, Edge Detection, Leaf, Android*
- 2014 **Applied Training Participant Management Information System at PT. Infomedia Nusantara Surabaya**  
A Web-based information system that was used to manage, assess, and evaluate the training participant in the Company. – *Web Application, Training Participant, Company*
- 2014 **Applied Ground Transportation Information System at Surabaya**  
An information system that was developed using web programming languages, proposed to provide easy information about ground transportation service for public society at Surabaya. – *Web Application, Transportation, Route Service*
- 2013 **Applied Visualization of 2D and 3D objects using C ++**  
A visualization of the organization of 2D and 3D object that was created to display a combination of specific object. – *Desktop Application, Computer Graphic, 2D/3D Object*
- 2013 **Applied Educational Games for Elementary School**  
A game application that was developed using Adobe Flash, proposed to provide a learning media for elementary school students digitally. – *Desktop Application, 2D Game, Elementary School*

## skill competence

	<b>Application</b>
Desktop	MacOS, Windows, Linux
Microsoft Office	Ms. Office, Ms. Excel, Ms. Power Point, Ms. OneNote, Ms. Outlook, Ms. Publisher
Programming	Python, R, PHP (Framework), Android, Matlab, Java, C++
Database	Oracle, PostgreSQL, MySQL, SQLite, Ms. Access
System Design	Ms. Visio, Power Designer (Use Case Diagram, Entity Relationship Diagram, Data Flow Diagram)
Design Graphics	Corel Draw, Adobe Photoshop
Analytic Tools	<b>Big Data</b> Hadoop, Pig, Hive, Oracle XQuery
	<b>Data Analytic</b> Power BI, Tableau, Pentaho Data Integration, Pentaho Schema Workbench, Pentaho Business Intelligence
	<b>Data Science</b> Anaconda (python package+GUI), Weka, RapidMiner

## competency certification

2019	<b>Professional Certification Institute – Information and Telecommunications Technology</b> <b>Indonesian:</b> Lembaga Sertifikasi Profesi (LSP) – TIK Competent in the area of <b>Software Development</b> with Qualification/Competency: <b>System Analyst</b> (the certificate is valid for 3 years)
2018	<b>Professional Certification Institute – Information and Telecommunications Technology</b>



**Indonesian:** Lembaga Sertifikasi Profesi (LSP) – TIK  
Competent in the area of **Software Development** with  
Qualification/Competency: **Database Programming** (the  
certificate is valid for 2 years)

2018 **Professional Certification Institute – Information and  
Telecommunications Technology**

**Indonesian:** Lembaga Sertifikasi Profesi (LSP) – TIK  
Competent in the area of **Computer Operator** with  
Qualification/Competency: **Practical Office Advanced** (the  
certificate is valid for 2 years)

## awards

2019

at Ministry of Communication and Information of the Republic of Indonesia  
and Microsoft.

Received a Digital Talent Scholarship Training 2019 –  
Online Academy Program with Digital Skills Training  
Theme, Collaboration between the Ministry of  
Communication and Information of the Republic of  
Indonesia and Microsoft.

2017 **Applied Master Program – Cum Laude Predicate**

at Electronic Engineering Polytechnic Institute of Surabaya

Academic Achievement for Applied Master of Information  
Technology with Cum Laude Predicate

2016 **Best Paper Award** at KCIC International Conferences

Category of Intelligent Computing for Medical  
Engineering and Analysis for the paper entitled: “The  
Determinant Factor of Breast Cancer on Medical  
Oncology using Feature Selection Based Clustering”

2015 **Applied Bachelor Program – Cum Laude Predicate**

at Electronic Engineering Polytechnic Institute of Surabaya

Academic Achievement for Applied Bachelor of  
Information Technology with Cum Laude Predicate

## research grants

2015            **Prototype of Smart Home NFC-based on the Smartphone**  
                  at Ministry of Research, Technology and Higher Education Indonesia  
                  The research of Creativity Student Program

## publications

**intellectual property right** (*Hak Kekayaan Intelektual – Hak Cipta*)

2018            **Reconstruction of 3 Dimensions the Heroes Monument**  
**Surabaya**

*(Rekonstruksi 3 Dimensi Tugu Pahlawan Surabaya)*

**Creator**

- 1.) Maulana Rizqi, ST., MT. MSc.,
- 2.) Agustinus Bimo Gumelar, ST., MT.,
- 3.) Agung Widodo, ST., MT.,
- 4.) Tresna Maulana Fahrudin, S.ST., MT.

**Number and Date of Application**

EC00201850990, October 22<sup>nd</sup> 2018

**Record Number**

000122041

2018            **Early Warning Application on Infant Immunization**  
*(Aplikasi Early Warning Pada Imunisasi Bayi)*

**Creator**

- 1.) Made Kamisutara, ST., M.Kom.
- 2.) I Putu Artaya, SE., MM.
- 3.) Tubagus Purworusmiardi, S.Kom., MM.
- 4.) I Gusti Ayu Sri Deviyanti, ST., MT.
- 5.) Achmad Zakki Falani, S.Kom., M.Kom.
- 6.) Tresna Maulana Fahrudin, S.ST., MT.
- 7.) Latipah, ST., MIT.

**Number and date of application**

EC00201849743, October 16<sup>th</sup> 2018

**Record Number**

000120993

## journal

2019            **Original Title**  
**Seleksi Fitur Dan Preferensi Penyerang Terbaik Liga**  
**Inggris Berbasis Fisher’s Discriminant Ratio, K-Means**  
**Clustering Dan Topsis**

**in English**

*Feature Selection and Preference for the Best Premier League Attackers  
Based on Fisher’s Discriminant Ratio, K-Means Clustering and Topsis*

- author  
Alif Sefty Wiyantoro, Lukman Junaedi, Tresna Maulana Fahrudin  
at Journal  
*JIF: Jurnal Ilmiah Informatika*
- 2019 Original Title  
**Analisis Sentimen Pengguna Twitter Terhadap Polemik Persepakbolaan Indonesia Menggunakan Pembobotan TF-IDF dan K-Nearest Neighbor**  
in English  
*Twitter User Sentiment Analysis of Indonesian Football Polemic Using TF-IDF Weighting and K-Nearest Neighbor*
- author  
Jeremy Andre Septian, Tresna Maulana Fahrudin, Aryo Nugroho  
at Journal  
*INSYST: Journal of Intelligent System and Computation*
- 2019 Original Title  
**Analisis dan Pemetaan Jumlah Penumpang Kereta Api di Indonesia Menggunakan Metode Statistik Deskriptif dan K-means Clustering**  
in English  
*Analysis and Mapping of the Number of Train Passengers in Indonesia Using Descriptive Statistical and K-means Clustering*
- author  
Benny Wijaya, Tresna Maulana Fahrudin, Aryo Nugroho  
at Journal  
*Mantik: Manajemen, Teknologi Informatika dan Komunikasi, Vol. 3, No. 2, Agustus 2019*
- 2018 Lyric Text Mining of Dangdut: Visualizing the Selected Words and Word Pairs of The Legendary Rhoma Irama's Dangdut Song in the 1970s Era  
author  
Tresna Maulana Fahrudin, Ali Ridho Barakbah  
at Journal  
*Systemic: Information System and Informatics Journal, Vol. 4, No. 2, December 2018*
- 2018 Original Title  
**Pemodelan dan Evaluasi Trend Forecasting Pada Kondisi Korban Kecelakaan Lalu Lintas Menggunakan Trend Moment dan Least Square**  
in English  
*Modelling and Evaluation of Trend Forecasting on Traffic Accidents Victims using Trend Moment and Least Square*

**author**

Sancaka Prana Wisesa, Aditya Singgi Prayogi, Tresna Maulana Fahrudin

**at Journal**

*Jurnal Sistem Cerdas – Asosiasi Prakarsa Indonesia Cerdas (APIC)*, Vol. 1, No. 2, December 2018

2017

**Data Mining Approach for Breast Cancer Patient Recovery**

**author**

Tresna Maulana Fahrudin, Iwan Syarif, Ali Ridho Barakbah

**at Journal**

*EMITTER International Journal of Engineering Technology*, Vol. 5, No. 1, June 2017. (this journal has been accredited by Ministry of Research, Technology and Higher Education Republic of Indonesia)

**conferences/proceedings**

2019

**‘Pick-them-Up’, an Android Based Application to Shorten School Shuttle Time**

**author**

Slamet Winardi, Tresna Maulana Fahrudin, Sri Wiwoho Mujanarko, Benediktus Anindito

**at Program**

*ISRM: International Seminar of Research Month on at UPN “Veteran” Jawa Timur, October 2019*

2019

**Estrous Cycle Prediction of Dairy Cows for Planned Artificial Insemination (AI) Using Multiple Logistic Regression**

**author**

Randy Anwar Romadhonny, Agustinus Bimo Gumelar, Tresna Maulana Fahrudin, Jauhara Rana Budiani, Wahyu Putra Adi Setiawan, Febri Dwi Cahaya Putra, Rizky Davit Nugroho

**at Program**

*iSemantic: International Seminar on Application for Technology of Information and Communication 2019-IEEE co-sponsored conference, at Universitas Dian Nuswantoro Semarang (Indonesia), September 21-22, 2019*

2019

**Human Voice Emotion Identification Using Prosodic and Spectral Feature Extraction Based on Deep Neural Networks**

**author**

Agustinus Bimo Gumelar, Afid Kurniawan, Adri Gabriel Sooi, Mauridhi Hery Purnomo, Eko Mulyanto Yuniarno, Indar Sugiarto, Agung Widodo, Andreas Agung Kristanto, Tresna Maulana Fahrudin

- at Program  
*IEEE 7th International Conference on Serious Games and Applications for Health (SeGAH), at Japan, August 2019*
- 2017 **Discovering Patterns of NED–Breast Cancer Based on Association Rules Using Apriori and FP–Growth (Indexed by Scopus)**  
 author  
Tresna Maulana Fahrudin, Iwan Syarif, Ali Ridho Barakbah
- at Program  
*The International Electronics Symposium on Knowledge Creation and Intelligent Computing (IES-KCIC) 2017–IEEE co-sponsored conference, at Surabaya (Indonesia), September 26–27, 2017*
- 2016 **The Determinant Factor of Breast Cancer on Medical Oncology using Feature Selection Based Clustering (Indexed by Scopus)**  
 author  
Tresna Maulana Fahrudin, Iwan Syarif, Ali Ridho Barakbah
- at Program  
*International Conferences on Knowledge Creation and Intelligent Computing (KCIC) 2016–IEEE co-sponsored conference, at Manado (Indonesia), November 2016*
- 2016 **Feature Selection Algorithm using Information Gain Based Clustering for Supporting the Treatment Process of Breast Cancer (Indexed by Scopus)**  
 author  
Tresna Maulana Fahrudin, Iwan Syarif, Ali Ridho Barakbah
- at Program  
*International Conferences on Informatics and Computing (ICIC) 2016–IEEE co-sponsored conference, at Lombok (Indonesia), October 2016*
- 2016 **Ant Colony Algorithm for Feature Selection on Microarray Datasets (Indexed by Scopus)**  
 author  
Tresna Maulana Fahrudin, Iwan Syarif, Ali Ridho Barakbah
- at Program  
*International Electronics Symposium (IES) 2016–IEEE co-sponsored conference, at Bali, September 2016*
- 2015 **Pembangunan Sistem Informasi Pelayanan Administrasi Sebagai Upaya Menjaga Validitas SKCK dan Perizinan di Lembaga Kepolisian**  
 In English: *Development of Ditintelkam (Directorate of Intelligence and Security) Administrative Services Information System an Attempt to Protect Validity of Police Record Certification in Police Institution*

**author**

Tresna Maulana Fahrudin, Wiratmoko Yuwono, Ferry Astika Saputra

**at Program**

*Seminar Nasional Teknologi Informasi dan Komunikasi Terapan (SEMANTIK) at Universitas Dian Nuswantoro Semarang, 2015.*

## organizational and event activities

- 2019 PIC in the Program of International Webinar Advancing Science in Indonesia: Current Global Research Practice at Narotama University
- 2019 Coordinator of Undergraduate Thesis in Informatics Engineering Program Study, Faculty of Computer Science, Universitas Narotama at Narotama University
- 2019 Examiner in the Server and PC Client Procurement for Computer-Based National Examination at All of Pasuruan State Junior High School, East Java at All of Pasuruan State Junior High School
- 2019 Participant in the Technical Guidance for Organizing the Content of Distance Education e-learning Courses – Director General of Learning and Student Affairs at LLDIKTI Wilayah VII Surabaya
- 2019 Participant in the Welcoming Industry 4.0: Smart Breeding Program at PT Robert Bosch Surabaya
- 2019 Participant in the Discussion of Knowledge Management Smart City: Good Practice and Strategy for Data Analytics Smart City at Sepuluh Nopember Institute of Technology (ITS) Surabaya
- 2019 Participant in the Socialization of Distance Education and Indonesian Online Learning System at State of Surabaya University (Organized by the Directorate General of Learning and Student Affairs, Ministry of Research and Higher Education) at State of Surabaya University
- 2019 The Chief Organizer of Virtual Reality and Augmented Reality Workshop for Beginner – Batch 1 at Narotama University

- 2018 Participant in the Managing Education Seminar in the Age of Industry 4.0 (supported by International Association of Traffic and Safety Sciences (IATSS) Forum Suzuka Japan) at Widya Mandala Catholic University of Surabaya
- 2018 Participant in the World Class Scholar Symposium 2018 at Airlangga University
- 2018 Participant in the Panel Discussion: Digital Content Development Strategy in Industrial Revolution 4.0 and IoT at Electronic Engineering Polytechnic Institute of Surabaya
- 2018 Assistant in Training of Office Software Utilization by Professional Certification Institute (*Lembaga Sertifikasi Profesi*) – Narotama University at Narotama University
- 2016 Regular Membership Student of International Society of Knowledge Creation (iSKC) ISKc
- 2015 Participant in National Seminar on Information Technology and Applied Communication *Seminar Nasional Teknologi Informasi dan Komunikasi Terapan (SEMANTIK)* at Universitas Dian Nuswantoro, Semarang City, Central Java
- 2014 Member of Student Activity Units – Table Tennis at Electronic Engineering Polytechnic Institute of Surabaya
- 2013 Participant of Creative Game Competition at Electronic Engineering Polytechnic Institute of Surabaya
- 2013 Participant of SEO (Search Engine Optimization) Workshop at Electronic Engineering Polytechnic Institute of Surabaya
- 2012 Liaison Officer at the fourteenth Industrial Electronics Seminar 2012 at Electronic Engineering Polytechnic Institute of Surabaya

## signature

The fully truth of the details are guaranteed. With strong sense of responsibility, hands on management and communication skills. Strong loyalty and self-motivation.

regards,

Tresna Maulana Fahrudin, S.ST., M.T.