

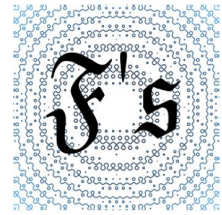


MUHAMMAD REZA FAHLEVI

(+62) 812-7548-0237 ◊ muhammadrezafahlevi666@gmail.com

◊ Github: github.com/m-RezaFahlevi ◊ Website:

<https://www.fahlevisia.com/mrfahlevi/>



EDUCATION

Universitas Sumatera Utara (Medan, Sumatera Utara)

Aug 2018 - 2022

- Bachelor of Computer Science (Sarjana Komputer — **S.Kom.**)
- GPA (IPK): 3.56 / 4.00 (3,56 / 4,00)
- *Department of Computer Science*, Faculty of Computer Science and Information Technology.
- Concentration: Evolutionary Computation | Heuristic Method | Numerical Analysis
- Favorite classes : Design & Analysis of Algorithms | Artificial Intelligence & Intelligence System | Heuristic Method | Probability and Statistics | Numerical Analysis | Image Processing | Modeling Technique and Simulation | Calculus | Discrete Mathematics | Automata — Grammar and Language

RESEARCH

Paper

- Finding Heuristical Value of Z, T, Chi Square, and F Based On Dynamic Significance Level.

Published

- Muhammad Reza Fahlevi, & Budiman, M. A. (2021). Computing the Value of Pi in the Manner of Lambda Function with R Statistical Programming Language. *Data Science: Journal of Computing and Applied Informatics*, 5(1), 39-48. <https://doi.org/10.32734/jocai.v5.i1-5556>

Non Peer-Reviewed

- Fahlevi, M.R. (2024) "The Description of Every Constructors, Functions Member, and Functions of Limav". Available: <https://www.fahlevisia.com/paper/2024/fsr3/>
- Fahlevi, M.R. (2024) "Limav: Computation of Vectors and Matrix in Linear Algebra." Available: <https://www.fahlevisia.com/paper/2024/fsr2/>
- Fahlevi, M.R. (2024) "Linav: Computation of Vectors in Linear Algebra." Available: <https://www.fahlevisia.com/paper/2024/fsr1/>

WORK EXPERIENCE

Badan Pusat Statistik Kab. Kampar - Software Developer Intern

Jul - Aug 2021

- Build a software for *Desa Cinta Statistik Desa Laboy Jaya* using R Shiny framework

PROJECTS

ShinyImageProcessing: An image processing app simulation contain blurring, RGB filtering, Median filtering, 3×3 kernel convolution, generate 3 type of noise in images, and edge detection, ShinyImageProcessing is created by using framework for creating web application using R code, shiny.

RCGA: A real-coded genetic algorithm for solving real-parameter optimization problem for function in R^3 , written in R and Python.

ilkom: R packages to find critical value of statistics z, t, χ^2 , and f for dynamic significance level by using heuristics procedure based on binary search, bisection method, and tabu search.

VNS: Minimizing error sum of square (SSE) of multi-linear regression model using Variable Neighborhood Search for continuous optimization problem.

TSP: Solving Travelling Salesman Problem (TSP) by using Simulated Annealing (SA) and Tabu Search (TS) algorithm.

limav.h: A C++ header as an extension `std::vector` for computation of vectors and matrix.

TECHNICAL SKILLS AND INTEREST

| | |
|-----------------------------|--|
| Languages | R Python Julia C++ LaTeX MySQL Javascript HTML and CSS Bootstrap Java PHP |
| Software & Tools | LyX High Level LaTeX Frontend RStudio Visual Studio Code VIM R shiny dplyr ggplot2 plotly pandas Jupyter |
| Current Interest | (Meta) Heuristic Method Numerical Analysis Probability & Statistics Pattern Recognition and Machine Learning Design & Analysis Algorithm |
| Awards | Participant in Province Science Olympiad for Chemistry, year 2017 Participant in Province English Debate Competition |