



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Mathematics Department

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STAFF HANDBOOK

Name	Indarsih		
Post	Applied Mathematics (Operation Research and Fuzzy Optimization)		
Academic Career		Institution	Year
	Initial Academic Appointment	Universitas Gadjah Mada	1999
	Post Doctoral	-	-
	Doctoral Degree	Universitas Gadjah Mada	2015
	Master Degree	Universitas Gadjah Mada	2002
	Undergraduate Degree	Universitas Gadjah Mada	1997
Employment	Position	Employer	Period
	Tenaga Pengajar/CPNS	Universitas Gadjah Mada	10-05-1999 - 30-03-2000
	Asisten Ahli Madya	Universitas Gadjah Mada	22-12-2000 - 31-03-2001
	Asisten Ahli	Universitas Gadjah Mada	31-03-2001 - 01-01-2004
	Lektor	Universitas Gadjah Mada	01-01-2004 – 10-11-2020
	Lektor Kepala	Universitas Gadjah Mada	10-11-2020 - now
Research and development projects over the last 5 years	1. Faculty Mathematics and Natural Sciences UGM Research Project “Multi Item Production Inventory Model with Backorder and Price Elasticity of Fuzzy Demand (“Model Inventori Produksi Multi Item Pada Kasus Pemesanan Kembali dengan Elastisitas Harga Terhadap Permintaan Fuzzy”) Period: 2019 Amount of financing: IDR 15.000.000 2. Faculty Mathematics and Natural Sciences UGM Research Project “Production Inventory Model with Product Defected Fuzzy Probabilistic” (“Sistem Inventori Produksi dengan Probabilitas Cacat Produk Fuzzy”) Period: 2020 Amount of financing: IDR 15.000.000		

	3. Faculty Mathematics and Natural Sciences UGM Research Project “Production Inventory Model with Demand Rate Fuzzy Normal” (“Sistem Inventory Produksi dengan Laju Permintaan Berdistribusi Normal Fuzzy”) Period: 2021 Amount of financing: IDR 15.000.000 4. Faculty Mathematics and Natural Sciences UGM Research Project “Goal Programming with Weighted to Solve Fuzzy Multi-Objektif” (“Pendekatan Goal Programming dengan Pebobotan untuk Menyelesaikan Masalah Multi Objektif Fuzzy”) Period: 2022 Amount of financing: IDR 15.000.000 5. Faculty Mathematics and Natural Sciences UGM Research Project “Production Inventory Model with Deteriorating Item, Backorder and Fuzzy Demand” (Model Inventori Produksi Barang yang Merosot dengan Backorder dan Permintaan Fuzzy) Period: 2023 Amount of financing: IDR 15.000.000	
Industry collaboration over the last 5 years	1. Project title : Evaluation and Optimization Study of Routing Sea Toll in Indonesia Partners: Balitbang Kementerian Perhubungan (2021) 2. Project title : The Optimal Policy Formulation for Sea Toll Route Using the Hub and Spoke Concept Partners: Badan Kebijakan Transportasi Kementerian Perhubungan (2023) 3. Project title : Policy Formulation for Developing Last Mile and First Mile Transportation to Support the Sea Toll Program and Primary Transport Services in Realizing Inclusive, People-Centered Transportation. Partners: Badan Kebijakan Transportasi Kementerian Perhubungan (2024) 4. Project title : Feasibility Study on the Potential Integration of Air and Sea Transportation Modes at PT PELNI Using the Hub and Spoke Partners: PT PELNI (2024)	
Patents and proprietary rights	Title	Year
Important publication over the last 5 years	Selected recent publications form a total of approx.:	
	A Single Item Production Inventory Model with the Fuzzy Demand IAENG International Journal of Applied Mathematics, 54:8, January 2024	
	A review of fuzzy random variables and its properties, The proceeding of 9th SEAMS-UGM International Conference on Mathematics and its Applications, AIP Conference Proceedings, 2024	
	A New DIRECT-Type Algorithm Based on Bisection of Rectangles and Diagonal Sampling with the Pareto Approach, IAENG International Journal of Applied Mathematics , Volume 54, Issue 7, July 2024, Pages 1352-1361	
	Analysis of the n-person noncooperative supermodular multiobjective Games, Operations Research Letters 51 (2023) 278–284	

	Efficiency Evaluation of Geo/Geo/1 Queue Performance Measure with Priority using Fuzzy Data Envelopment Analysis Engineering Letters, 31:2, EL_31_2_21 Volume 31, Issue 2: June 2023		
	Nash equilibrium for manufacturer-retailer inventory model with perishable goods and time depending holding cost. International Conference on Mathematics: Education, Theory, and Application, ICMETA 2021, AIP Conference Proceedings.		
	Analysis of a Single Manufacturer Multi-Retailer Inventory Competition Using Supermodular Multi-Objective Games, Mathematical Modelling of Engineering Problems Vol. 9, No. 3, June, 2022, pp. 559-567		
	Analysis of the Single-Vendor–Multi-Buyer Inventory Model for Imperfect Quality with Controllable Lead Time IAENG International Journal of Applied Mathematics, 51:3, IJAM_51_3_23 : 2021		
	Drug Elimination in Two-Compartment Pharmacokinetic Models with Nonstandard Finite Difference Approach IAENG International Journal of Applied Mathematics, 50:2, JAM_50_2_25 Volume 50, Issue 2: June 2020		
	Backorders Case in Inventory Model with Fuzzy Demand and Fuzzy Lead Time IAENG International Journal of Computer Science, 46:3, IJCS_46_3_05 (Advance online publication: 12 August 2019)		
Activities in specialist bodies over the last 5 years (Membership without a specific role need not be mentioned)	Organization	Role	Period
	IndoMS	Treasurer	2020-2024