



UNIVERSITAS INDONESIA

Faculty of Mathematics and Natural Sciences

Department of Mathematics

Building D, Kampus UI Depok 16424, Telp: 021 - 7863439,

Email: sekretariat.math@sci.ui.ac.id, website: <https://www.math.ui.ac.id/>

STAFF HANDBOOK

Name	Prof. Alhadi Bustamam, Ph.D.		
Expertise	Bioinformatics, Computational Mathematics, Biomedical Informatics and Advanced Computing		
Academic career		Institution	Year
	Undergraduate degree	Universitas Indonesia	1996
	Master degree	Universitas Indonesia	2002
	Doctoral degree	The University of Queensland, Australia	2011
	Post-doctoral	-	
Employment		Employer	Period
	Lecturer	UI	1997 - 2001
	Assistant Professor	UI	2001 - 2013
	Associate Professor	UI	2013 - now
Research and development projects over the last 5 years	<ol style="list-style-type: none"> 1. Riset PDUPT DIKTI (Directorate General of Higher Education), "Pengembangan Genomic Biomarker dengan Pendekatan Data Science untuk Analisa Penyakit Diabetes dan Kanker" Periode 2021 Amount of financing: Rp. 104.000.000 2. Riset PDUPT DIKTI (Directorate General of Higher Education), "Analisis Genomics pada Multimodal Data untuk Deteksi Demam Berdarah Dengue (DBD) dan Penyakit Kronis Menggunakan Pendekatan Feature Selection Fusion", Period 2021, Partner PIC: Prof. Wibowo Mangunwardoyo Amount of financing: Rp. 202.000.000 3. Riset SATREPS Project UI – JICA Japan, "Detection of Rubber Disease using Data Science and Artificial Intelligence Approach", Period 2021, Amount of financing: Rp. 200.000.000 4. Riset PTUPT DIKTI (Directorate General of Higher Education), "Computer-Aided Diagnosis (CAD) untuk Pendeteksian Dini Diabetic Retinopathy", Period 2021, Amount of financing: Rp. 150.000.000 5. Riset PUTI Q1 UI, Period 2020, Amount of financing Rp. 132.000.000 6. Riset PUTI KI2Q2 UI (International Collaboration with Perdana University Malaysia), Period 2021. Amount of financing Rp. 200.000.000 7. Riset PUTI Q2 UI, Period 2021, Amount of financing Rp. 86.000.000 8. Riset Konsorsium Nasional ICT DIKTI (Directorate General of Higher Education), Period 2020, 9. Riset PUTI Q4 Saintekes UI, Period 2020, 		

	<p>Amount of financing Rp. 50.000.000</p> <p>10. Riset World Class Research (WCR) DIKTI (Directorate General of Period 2019,</p> <p>11. Riset PITTA QQ UI, Period 2019</p> <p>12. Riset PITTA B UI, Period 2019,</p> <p>13. Riset PITTA A UI, Period 2019,</p> <p>14. Riset PDUPT DIKTI (Directorate General of Higher Education), Period 2019,</p> <p>15. Riset PITTA UI, Period 2018,</p> <p>16. Riset PUPT DIKTI (Directorate General of Higher Education), Period 2017,</p> <p>17. Riset PITTA UI, Period 2017.</p>	
Industry collaborations over the last 5 years	<p>1. Reviewer of National and International Research Grant DIKTI (Sept 2019 – now) Partners: Directorate General of Higher Education (DIKTI)</p> <p>2. Reviewer of Indonesian Education Scholarship, Ministry of Finance, Indonesia (Apr 2019 – now) Partners: Ministry of Finance, Indonesia</p> <p>3. ATM Sehat Project (2021 – 2022) Partners: UMG Idea Lab and IMERI of Medicine Faculty, Universitas Indonesia</p>	
Patents and proprietary rights	<p>Title Dr. Tri Handika, Prof. Djati Kerami, Alhadi Bustamam, Ph.D, Dr. Ernastuti. “Metode Pra-Pemrosesan <i>High-Level Language</i> untuk Memparalelkan <i>Nested-Loop 2-Level</i> pada Prosesor Multi-Inti” No: IDS000002088 Date: 16 January 2019</p>	<p>Year 2019</p>
Important publications over the last 5 years	<p style="text-align: center;">Selected Recent Publications</p> <p>1. Alhadi Bustamam, Haris Hamzah, Nadya A Husna, Sarah Syarofina, Nalendra Dwimantara, Arry Yanuar, Devvi Sarwinda: Artificial intelligence paradigm for ligand-based virtual screening on the drug discovery of type 2 diabetes mellitus, <i>Journal of Big Data – Springer</i>, 8, 74, 1-21, 2021</p> <p>2. Permatasari Silitonga, Alhadi Bustamam, Hengki Muradi, Wibowo Mangunwardoyo, Beti E Dewi: Comparison of Dengue Predictive Models Developed Using Artificial Neural Network and Discriminant Analysis with Small Dataset, <i>Applied Sciences</i>, 11, 3, 943, 2021</p> <p>3. Alhadi Bustamam, Titin Siswantining, Tesdiq P Kaloka, Olivia Swasti: Application of bimax, pols, and lcm-mbc to find bicluster on interactions protein between hiv-1 and human, <i>Austrian Journal of Statistics</i>, 49, 3, 1-18, 2020</p> <p>4. Tesdiq Prigel Kaloka, Alhadi Bustamam, Devvi Sarwinda, Bariqi Abdillah: Detection Lesion Characteristics of Diabetic Retinopathy using Machine Learning and Computer Vision, <i>International Journal on Advanced Science, Engineering and Information Technology</i>, 10, 4, 1367-1373, 2020</p>	

	<p>5. Alhadi Bustamam, Soeganda Formalidin, Titin Siswantining, Zuherman Rustam: Finding correlated biclusters from microarray data using the modified lift algorithm based on new residue score, <i>International Journal of Data Mining and Bioinformatics</i>, 24, 4, 326-343, 2020</p> <p>6. Alhadi Bustamam, Mohamad IS Musti, Susilo Hartomo, Shirley Aprilia, Patuan P Tampubolon, Dian Lestari: Performance of rotation forest ensemble classifier and feature extractor in predicting protein interactions using amino acid sequences, <i>BMC Genomics</i>, 20, 950, 1-13, 2019</p> <p>7. Hamimah Alatas, Hendri Murfi, Alhadi Bustamam: Topic Detection using fuzzy c-means with nonnegative double singular value decomposition initialization, <i>International Journal of Advances in Soft Computing and its Applications</i>, 10, 2, 2018</p> <p>8. Heru Suhartanto, Arry Yanuar, Ari Wibisono, Denny Hermawan, Alhadi Bustamam: The performance of a molecular dynamics simulation for the Plasmodium falciparum enoyl-acyl carrier-protein reductase enzyme using Amber and GTX 780 and 970 double graphical processing units, <i>International Journal of Technology</i>, 9, 1, 2018</p> <p>9. Alhadi Bustamam, D. Aldila , and A. Yuwanda: Understanding Dengue Control for Short- and Long-Term Intervention with a Mathematical Model Approach, <i>Journal of Applied Mathematics</i>, 2018</p>		
Scholar UI ID	https://scholar.ui.ac.id/en/persons/alhadi-b		
Activities in specialist bodies over the last 5 years	Organization	Role	Period
	1. Data Science Centre (DSC), Faculty of Mathematics and Natural Sciences Universitas Indonesia	Head	2018 – Now
	2. Postgraduate Program in Mathematics, Faculty of Mathematics and Natural Sciences Universitas Indonesia	Head	2018 – Now
	3. Reviewer Nasional DIKTI	Reviewer of National Research Grant	2018 - Now
	4. Reviewer LPDP	Reviewer of LPDP Scholarship Grant	2018 - Now
	5. Department of Mathematics, Faculty of Mathematics and Natural Sciences Universitas Indonesia	Head	2014-2018

	6. Masyarakat Bioinformatika dan Biodiversitas Indonesia (MABBI)	Member	2019 - Now
	7. IEEE- Indonesia Section	Member	2019 - Now
	8. Indonesian Biomathematical Society (IBMS)	Member	2016 - Now
	9. Association for Computing Machinery (ACM)	Member	2014 - Now
	10. IndoMS for West Java, Jakarta and Banten section	Chairman	2014-2017