



UNIVERSITAS INDONESIA

Faculty of Mathematics and Natural Sciences

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STAFF HANDBOOK

Name	Titin Siswantining		
Expertise	Applied Statistics		
Academic career		Institution	Year
	Undergraduate degree	Institut Teknologi 10 Nopember Surabaya (ITS)	1984
	Master degree	EHESS/Paris V, France	1990
	Doctoral degree	IPB University	2013
	Post-doctoral	-	-
Employment		Employer	Period
	Lecturer	Universitas Indonesia	1985 - 1988
	Assistant Professor	Universitas Indonesia	1988 - 2001
	Associate Professor	Universitas Indonesia	2001 - now
Research and development projects over the last 5 years	<ol style="list-style-type: none"> 1. Indonesian RistekBRIN with PUPT research grant scheme (PTUPT DIKTI); Computer-Aided Diagnosis (CAD) untuk Pendeteksian Dini Diabetic Retinopathy Period 2020- 2022, Partner Alhadi Bustamam (PI). Amount of financing 2. Indonesian RistekBRIN with Thesis for magister research grant scheme (PPS-PTM); Implementasi Missing Value dengan Menggunakan Metode ANNImpute pada Microarray Data Ekspresi Gen dengan menggunakan klasifikasi XG-Boost. Period 2020. Partner : Alhadi Bustamam (PI) Amount of financing 3. Indonesian Research and Higher Education Ministry (Kemenristekdikti) with PDUPT research grant scheme; Pengembangan Genomic Biomarker dengan Pendekatan Data Science untuk Analisa Penyakit Diabetes dan Kanker Period : 2019 - 2021 Partner : Alhadi Bustamam (PI) Amount of financing : 4. Indonesian Research and Higher Education Ministry (Kemenristekdikti) with PDUPT research grant scheme; Pendeteksian Knee Osteoarthritis menggunakan Modified Support Vector Machines dan Fuzzy Kernel Robust C-Means. Period : 2019 – 2020 Partner : Zuherman Rustam (PI) Amount of financing 5. Universitas Indonesia with PUTI Q3 research grant scheme. Parallel Clustering Algorithms & Implementations for Big Data Analytic. 		

	<p>Period 2020 Partner : Alhadi Bustamam (member), Devvi Sarwinda (member). Amount of financing : 56.000.000,-</p> <p>6. Universitas Indonesia with PUTI Q2 research grant scheme, Genomic Study with the Application of Triclustering Algorithm to Predict Chronic Diseases Using Machine Learning Method. Period 2020, Partner Alhadi Bustamam (member) Amount of financing 86.000.000,-</p> <p>7. Universitas Indonesia with PUTI Proceeding research grant scheme Implementation of 3D Microarray Gene Expression Data Using d- trimax, EDISA, and OPTricluster Algorithms.</p> <p>Period 2020 Partner : Saskya Mary Soemartojo (member); Devvi Sarwinda (member) Amount of financing : 23.028.300</p> <p>8. Universitas Indonesia with PITTA research grant scheme Implementasi Expectation Maximization (EM) Algorithm Dalam Menganalisis Data Medis Period : 2019 Partner : Amount of financing : 90.000.000</p> <p>9. Universitas Indonesia with PITTA research grant scheme Imputasi Ganda pada Medical Data untuk Menganalisis Penyakit Kronis Period : 2019 Partner : Alhadi (member), Devvi sarwinda (member) Amount of financing : 90.000.000</p> <p>10. Universitas Indonesia with PITTA research grant scheme Pendekatan Metode Feature Selection Untuk Menyiasati Missing Value Menggunakan Statistika Komputasi Period : 2019 Partner : Alhadi Bustamam (member); Devvi Sarwinda (member). Amount of financing : 90.000.000,-</p> <p>11. Indonesian Research and Higher Education Ministry (Kemenristekdikti) with PDUPT research grant scheme (PDUPT DIKTI). Konstruksi Machine Learning Baru Berbasis Kernel Untuk Klasifikasi Jenis Data Kanker Period : 2018 – 2019 Partner : Zuherman Rustam (PI) Amount of financing</p> <p>12. Basic Research Internal Universities Skoring Faktor-Faktor yang Mempengaruhi Timbulnya Diabetes Mellitus pada Pasien Tuberkulosis Period : 2018 Partner : Saskya Mary Soemartojo (member); Devvi Sarwinda (member) Amount of financing :</p> <p>13. Basic Research Internal Universities</p>
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	<p>Implementasi Algoritma Genetika dan Multiple Linear Regression dalam Desain Obat Kanker Payudara Period : 2018. Partner : Saskya Mary Soemartojo (member); Devvi Sarwinda (member) Amount of financing :</p> <p>14. Basic Research Internal Universities Analisis Penyakit Kronis Ditinjau dari Sarana Air Bersih dan Lingkungan Tempat Tinggal dengan Pemodelan Statistika Period : 2018 Partner : Saskya Mary Soemartojo (member); Devvi Sarwinda(member). Amount of financing :</p> <p>15. Indonesian Research and Higher Education Ministry (Kemenristekdikti) with PDUPT research grant scheme Analisa Multimodal Data Menggunakan Fundus Image dan Protein Sequence dalam Mendeteksi Diabetic Retinopathy Period : 2017 – 2018. Partner : Alhadi Bustamam (PI) Amount of financing :</p> <p>16. Basic Research Internal Universities Pengklasifikasian Penyakit Diabetes dan TBC, serta Komplikasinya Dari Sudut Pandang Bioinformatika Period : 2017 Partner : Alhadi Bustamam (member) Amount of financing :</p> <p>17. Dikti sumber dana lain Studi genomik berbasis spectral analysis dan terapannya pada analisa penyakit kanker. Period : 2016 Partner : Alhadi Bustamam (PI) Amount of financing :</p>	
Industry collaborations over the last 5 years	<ol style="list-style-type: none"> Project Title: Assesor Program Studi Badan Akreditasi Nasional PT(2016- now) Partner : BAN PT Jakarta Project title : Asesor Pembukaan Program Studi Baru (2020-sekarang) Partners : Kemdikbud 	
Patents and proprietary rights	Title <ol style="list-style-type: none"> DYTERasDAS Application Watershed Health Assessment (DAS) and Biotilik. Partner: Eva Rolia, Dwita Sutjningsih, Yasman, Dwi Retno Wahyuningsih Students Guide Book: Statistics and Probability. Partner: Ardhiansyah, Ariandhini, Bambang Heru Susanto, Harinaldi, Setiadi, Tania Surya Utami 	Year 2021

<p>Important publications over the last 5 years</p>	<p style="text-align: center;">Selected recent publications</p> <ol style="list-style-type: none"> 1. Titin Siswantining, A. Eriza Aminanto, Devvi Sarwinda, Olivia Swasti. Biclustering Analysis Using Plaid Model on Gene Expression Data of Colon Cancer. 2021. Austrian Journal of Statistics, July 2021, Volume 50, 101–114. 2. Titin Siswantining, Herley Shaori Al-Ash, Kasiyah Junus, Lia Sadita, Diana Nur Vitasari, Luthfirda Sjahfirdi, Harinaldi. Students' Preparedness to Learn in e-Learning Environment and their Perception on The MPKT Lecturers' Readiness to Manage Online Class. 2021. Advances in Science, Technology and Engineering Systems Journal, Vol. 6, No. 2, 387-398 3. Kasiyah Junus, Harry Budi Santoso, Panca Oktavia Hadi Putra, Arfive Gandhi and Titin Siswantining. 2021. Lecturer readiness for online classes during the pandemic: A survey research. Education Sciences, Volume 11, Issue 3, March 2021, Article number 139. 4. Titin Siswantining, Noval Saputra, Devvi Sarwinda and Herley Shaori Al-Ash. 2021. Triclustering discovery using the δ-trimax method on microarray gene expression data. Symmetry Volume, 13, Issue 3, March 2021, Article number 437. 5. Titin Siswantining, Taufik Anwar, Devvi Sarwinda, Herley Shaori Al-Ash. 2021. A novel centroid initialization in missing value imputation towards mixed datasets. Communications in Mathematical Biology and Neuroscience, Volume 2021, 2021, Article number 11, Pages 1-36. 6. Eva Rolia, Dwita Sutjiningsih, Yasman, Titin Siswantining. 2021 . Modeling watershed health assessment for five watersheds in Lampung Province, Indonesia. Advances in Science, Technology and Engineering Systems, Volume 6, Issue 1, 2021, Pages 99-111. 7. Titin Siswantining, Niken Pratiwi Cahya Dewi Purwandani, Maria Hedwig Dewi Susilowati and Adi, Wibowo. Geoinformatics of tuberculosis (TB) disease in Jakarta city Indonesia. 2020. International Journal of GEOMATE, Volume 19, Issue 72, 2020, Pages 35-42 8. 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. 2020. Austrian Journal of Statistics, Volume 49, Issue 3 Special Issue, 2020, Pages 1-18 9. Alhadi Bustamam, Soeganda Formalidin, Titin Siswantining and Zuherman Rustam Finding correlated biclusters from microarray data using the modified lift algorithm based on new residue score. 2020. International Journal of Data Mining and Bioinformatics, Volume 24, Issue 4, 2020, Pages 326-343, 2020. 10. Titin Siswantining, Annisa Kamalia, Zuherman Rustam, Fajar Subroto, Aditya Suryansyah Semendawai. Classification of Thalassemia Data Using K-Nearest Neighbor and Naïve Bayes. 2019. International Journal of Advanced Science and Technology. Volume 28, Issue 8 Special Issue, 8 October 2019, Pages 15-19, 2019. 11. Abinawanto, Alfi Sophian, Pipih Suningsi Effendi, Titin Siswantining. Short Communication: Variation in vocal cord morphometric characters among dangdut type and the slow type Gaga Chicken. 2018. BIODIVERSITAS, Volume 19, Number 5, September 2018, Pages: 1902-1905, 2018.
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	<p>12. Alhadi Bustamam, Devvi Sarwinda, Radifa H. Paradisa, Andi Arus Victor, Anggun Rama Yudantha, Titin Siswantining. Evaluation of convolutional neural network variants for diagnosis of diabetic retinopathy. <i>Commun. Math. Biol. Neurosci.</i> 2021:42, 2021.</p> <p>13. Noverita Dian Takarina, Tjong Giok Pin, Titin Siswantining. <i>International Journal of Marine Science. Amino Acids Content of Anadara indica at Garapan and Cibungur Rivermouths, Banten Province, Indonesia.</i> 2016, Vol. 6, No. 13. 1 - 4. doi: 10.5376/ijms.2016.06.0013. 2016.</p>		
Scholar UI ID	https://scholar.ui.ac.id/en/persons/titin-siswantining		
Activities in specialist bodies over the last 5 years	Organization	Role	Period
	Indonesian Statistics Higher Education Forum	Secretary for 3 (three) periods	2016 – 2018, 2018 – 2020, 2020 - 2022