

CURRICULUM VITAE

1. Self-Identity

1	Full Name (with title)	Prof. Dr. Drs. Anak Agung Ngurah Gunawan,MT.
2	Functional Position	Professor / Professor
3	Office Address	Bukit Jimbaran Bali Campus
4	Phone/Fax Number	(0361) 703138 / (0361) 701907
5	E-mail address	a.a.ngurahgunawan@unud.ac.id
6	Graduates Who Have Been Produced	S-1= 100 people; S2= - People; S3= 1 person
7 Courses Taught		1. Computational physics 1
		2. Computational Physics 2
		3. AI Application Programming
		4. Computer Program
		5. Microprocessor
		6. Tomography
		7. Sensor dan Interface
		8. Robotics
		9. Elektronika Digital
		10. Microcontroller
		11. Digital Image Processing
		12. WEB programming
		13. Electronics Industry
		14. Artificial Neural Network
		15. Satellite Multivariate

1. History of Education

	S-1	S-2	S-3
College Name	UNAIR	ITS	UNAIR
Science	Fisika	Computer science	Fisika
Entry-Graduation Year	1982-1988	1997-1999	2010-2013
Thesis/Dissertation Title	The influence of the shape of the fins on the heat dissipation system	Microcalcification analysis using gray-level image structure characteristics	Model of determination of mamma <i>abnormalities</i> based on the physical magnitude of the film from mammography
Name of Supervisor/Promoter	Ir. Supardi	Prof. Dr.Handayani	Prof. Dr. Suhariningsih

1. Research Experience in the Last 5 Years

(not Thesis, Thesis, or Dissertation)

No	Year	Research Title	Funding	
			Source*	Jml(Jute Rp)
1	2011	Model of Histological Type Determination of Ca Mamma Using Physical Film Quantities from Mammography X-ray Photos	Mandiri	50
2	2012	Model of Determination of Contralateral Ca Mamma Health Conditions Using Physical Film Quantities from Mammography X-ray Photos	Mandiri	50
3	2013	Ca Mamma Stage Determination Model Using Physical Film Magnitude from Mammography X-ray Photos	Mandiri	50
4	2014	Model of improved reading of mammography x-ray photos on determination of the type of	Hibah Ungulan Udayana (PNBP Unud 2014)	35

		histopathology ca mamma using special cropping patterns.		
5	2015	Model of determination of malignant lesions (<i>carcinoma</i>) and benign lesions of breast cancer (<i>ca mamma</i>) using physical film quantities from mammography x-ray photos	Fudamental Desentralisasi	50
6	2016	Determination of breast health using the methods of k-nearest neighbourhood with entropy and angular moment combination	Mandiri	50
7	2016	Method of determining the variant of breast tumor birads using the physical size of the film from mammography x-ray photos	Fundamental	50
8	2017	Utilization of physical parameters to classify histopathology and stage ca mammae using the k-nearest neighbourhood method (stage 1)	PDUPT	52.5
9	2018	Utilization of physical parameters to classify histopathology and stage ca mammae using the k-nearest neighbourhood method (stage 2)	PDUPT	52.5
10	2018	Development of Superconductors Based on Yttrium Oxide 124 and 358 Ag-Doped Nano-Crystals for Electronic and Magnetic Materials	Competency-Based Research	100
11	2019	Development of Superconductors Based on Yttrium Oxide 124 and 358	Competency-Based Research	100

		Ag-Doped Nano-Crystals for Electronic and Magnetic Materials		
12	2020	Breast cancer clustering using physical parameters and Support Vector Machine (SVM) method	Udayana Leading Research (PUU)	45
13	2021	Classification of Invasive Ductal Carcinoma (IDC) – Invasive Lobular Carcinoma (ILC) Breast Cancer Using Support Vector Machine (SVM) Method	Udayana Leading Research (PUU)	31
14	2022	Utilization of Physical Parameters to Classify <i>Benign-Malignant</i> Breast Cancer Using <i>Support Vector Machine</i> (SVM) Method	Udayana Leading Research (PUU)	48.5
15	2023	Utilization of Physical Parameters to Classify <i>Benign-Malignant</i> Breast Cancer Using the K-nearest Neighbourhood (KNN) Method	Udayana Leading Research (PUU)	47.5

1. Community Service Experience in the Last 5 Years

No	Year	Community Service Title	Funding	
			Source*	Jml(Jute Rp)
1	2010	OSN Teacher Coach of High School in Bali Province	Pimprov Bali	50
2	2010	OSN Coach for High School Children in Bali Province	Pimprof Bali	50
3	2013	Social service in baha mengwi village, Badung Regency, Bali	Swadaya	5

4	2013	As DPL KKN PPM UNUD in Keliki village, Giayar Regency, Bali	Unud	5
5	2014	As DPL KKN PPM UNUD in Keliki village, Giayar Regency, Bali	Unud	5
6	2015	As DPL KKN PPM UNUD in Bedaulu village, Giayar, Bali	Unud	5
7	2015	Social service at Bukit Jimbaran Bali Campus	Unud	1
8	2015	TOT KKN PPM Unud	Unud	1
9	2015	Coach of Science Olympiad SMU Kodya Denpasar	Kodya Denpasar	1
10	2016	As DPL KKN PPM UNUD in Tembuku Bangli village, Bali	Unud	5
11	2017	Udayana University Disaster Mitigation Service to the Post in Gelgel Kelungkung Village.	Unud	
12	2017	Disaster mitigation service in the form of handing over aid to communities affected by the Mount Agung eruption disaster	Unud	
13	2018	Community service at Mahawidya Saraswati Temple, Bukit Jimbaran	Unud	
14	2018	Olimpiade Fisika Tingkat Nasional	Unud	
15	2019	Greening and counseling on plastic waste	Unud	
16	2019	pengabdian physic creative education traning	Unud	
17	2020	Dissemination of research and service guidelines DRPM edition XIII	Unud	
18	2020	Equalization of perception, monitoring and evaluation online for LPPM Unud reviewers.	Unud	
19	2021	Physics Socialization 2021	Unud	
20	2021	Webinar Matching fund dan kedaireka	Unud	
21	2021	Socialization of Review Procedures for Research Proposal Presentation and PNBP Fund Service of Udayana University in 2021	Unud	
22	2022	Magroup planting in crab village	Unud	
23	2023	Closer socialization with Kedaireka matching fund program	Unud	

24	2023	Focus group discussion panduan reviewer	Unud	
25	2023	Introduction of liquid fertilizer processing technology	Unud	

1. Experience in writing scientific aretiquette in journals in the last 5 years

No	Judul Artikel Ilmiah	Volume/Nomor/Tahun	Nama Jurnal
1	Determination of Physical Parameter Model For The Photo Film Mammographic X-ray Results on The Breast Cancer Histology Classification	Vol. 7, n0.45-48, 2012, PP. 2235-2244 http://www.m-hikari.com/ijcms/ijcms-2012/45-48-2012/gunawanIJCMS45-48-2012.pdf	International Journal of Contemporary Mathematical Sciences, (citation 8)
2	Conversion of Images to Numerical Breast Health Conditions for Determining the Contralateral	Vol.7, No.104, 2013, PP.5185-5191, http://www.m-hikari.com/ams/ams-2013/ams-101-104-2013/gunawanAMS101-104-2013.pdf	Applied mathematical sciences Q3, (citation 8)
3	Combination of Modified Soybean Tempeh M-3 with Capacity, Decreases 8-Hydroxy-2-Deoxyguanocine, and Skin Textture Damage in Rat Irradiated with Ultraviolet.	Vol.2, No.2, 2014, PP. 49-60.	Pure and Applied Chemical Sciences.
4	A Novel Model Determination of Breast Cancer Stage Using Physical Parameter.	Vol 87, No.1, 2014, PP.23-35 https://www.researchgate.net/publication/286696827_A_novel_model_determination_of_breast_cancer_stage_using_physical_parameter	Far East Journal of Matemactical Sciences. Q4, (citation 10)
5	Readability Increase Of Mammography X-Ray Photos Results In Determining The Breast Cancer Histopathology Types Using Special Pattern Cropping With Physical Parameter	Vol. 2, No.1, 2014, PP.43-52 https://123dok.com/document/z3d72jdy-readability-increase-mammography-determining-histopathology-cropping-physical-parameter.html	Advances in Applied Physics

6	Supplementation of <i>Cantharanthus Roseus</i> leaf Extract as Anti-Inflammatory Substance to Hypercholesterolemic Wistar Derived-Rats	Vol3. ,No.1,2015, PP.1-9	Pure and Applied Chemical Sciences.
7	Induction of Apoptosis and Antiangiogenesis Effects of Pinostrobin from <i>Kaempferia pandurata</i> Roxb against Induction of Fibrosarcoma Mice Results Benzopiren	Vol.3 ,No. 1,2015, PP.19-29	Pure and Applied Chemical Sciences.
8	Determination model of carcinoma and benign types using physical quantities of the ca mammae mammography	Vol.22, No.7, 2015, pp. 181-188	Wulfenia journal, ISI indexed journal with impact factor of 0,267, (citation 3)
9	Application of Compass and Range Sensors On Eyeglass for Blind People Based On Microcontroller AT89S52	Vol 3, No. 1, 2015, PP. 23-34 http://www.m-hikari.com/aap/aap2015/aap1-2015/p/gunawanAAP1-2015.pdf	Advances in Applied Physics
10	Effects of medium intensity pulsed electrical fields on the psidomonas aeroginosa bacteria biofilm growth	Vol.66 , No.3, 2016, ISSN: 0007-5922.	Mitteilungen Klosterneuburg Journal, ISI indexed journal with impact factor of 0,1
11	Determination of breast health using the methods of k-nearest neighbourhood with entropy and angular moment combination	Vol.31, No. 4, 2016, ISSN. 0254-0223. http://ciencia-e-tecnica.org/cien/index.php/archive/part/31/4/1/?currentVol=31&currentissue=4	Ciência e Técnica Vitivinícola Journal, Q4
12	Determination of Breast Tumor Birads Variant Using	Vol.3, No.1, 2016, 241-250.	Journal of Innovative

	Physical Parameter on the Mammography X-Ray Film	http://www.m-hikari.com/jite/jite2016/jite1-2016/p/gunawanJITE1-2016.pdf	Technology and Education.
13	Measuring and Observing of Ambient Temperature of Broiler Chicken Farm at Gianyar Region by SMS Based AVR Atmega16 Microcontroller	Vol. 5, 2017, no. 1, 1 – 7 http://www.m-hikari.com/aap/aap2017/aap1-2017/p/gunawanAAP1-2017.pdf	Advances in Applied Physics
14	Humidity Monitoring System for Oyster Mushroom Cultivation Room by Web Based AVR ATmega328P-PU	Vol. 6, 2018, no. 1, 9 - 13 http://www.m-hikari.com/aap/aap2018/aap1-2018/p/gunawanAAP1-2018.pdf	Advances in Applied Physics
15	LPG Leakage Control Using SMS Through SIM800L With MQ-2 Sensor And Stepper Motor Based on Arduino Uno	Vol. 6, 2018, no. 1, 15 – 18 http://www.m-hikari.com/aap/aap2018/aap1-2018/p/gunawanAAP1-2018-2.pdf	Advances in Applied Physics
16	The Utilization of Physics Parameter to Classify Histopathology Types of Invasive Ductal Carcinoma (IDC) and Invasive Lobular Carcinoma (ILC) by Using K-Nearest Neighbourhood (KNN) Method	Vol.8, No.4, 2018. Terindek Scopus Q2. https://ijece.iaescore.com/index.php/IJECE/article/view/8504	International Journal Elektrical And Computer Engineering (IJECE), Q2, (citation 3)
17	Use of Short Message Service (SMS) Based ATmega328 Microcontroller and SIM800L Modules as on / off Control Electronic Equipments	Vol. 6, 2018, no. 1, 19 - 24 HIKARI Ltd, www.m-hikari.com https://doi.org/10.12988/aap.2018.856 http://www.m-hikari.com/aap/aap2018/aap1-2018/p/gunawanAAP1-2018-3.pdf	Advances in Applied Physics,

18	Combination Model Of Electric Field And Light For Deactivation Biofilm Bacteria	Vol.17, 2018, no.1, pp.153-165. Doi:10.13166/i2m.17.153-165 https://www.iieta.org/journals/i2m/paper/10.3166/I2M.17.153-165	Instrumentation, Measure, Metrologie, Q4
19	Rancang Bangun Alat Ukur Detak Jantung Dan Suhu Tubuh Menggunakan <i>Pulse Sensor</i> Dan Ir Mlx90614 Berbasis Atmega328 Dan Teknologi Gsm	Vol. 19, No. 2, Agustus 2018	Buletin Fisika, Sinta 4
20	Increased <i>Gliricidia sepium</i> in Ration Containing Rice Straw on Rumen Fermentation and Microbial Protein Synthesis of Indigenous Bali Cattle	Vol.7, maret 2019, No.3, 193-199, Nexus, http://www.nexusacademicpublishers.com/table_contents_detail/4;/1089/html	Advances in Animal and Veterinary Sciences, Q3
21	Classification Of Breast Cancer Grades Using Physical Parameters And K-Nearest Neighbor Method	Vol.10, 2019, no.2, http://dx.doi.org/10.12928/telkomnika.v17i1.9957 http://telkomnika.uad.ac.id/index.php/TELKOMNIKA/article/view/9797	TELKOMNIKA, Q3
22	Study of The Synthesis Process and Microscopic Structure of Y-124, Y-259, and Y-358 Superconductors	Vol 1 ,2019,no.1 IOP Publishing doi:10.1088/1757-899X/515/1/012037 https://iopscience.iop.org/article/10.1088/1757-899X/515/1/012037	IOP Conf. Series: Materials Science and Engineering (Q3)
23	Water Level Detection System Based On Ultrasonic Sensors Hc-Sr04 And Esp8266-12 Modules With Telegram And Buzzer Communication Media	Vol.18,No.3, June 2019, PP.305-309. https://doi.org/10.18280/12m.1800311 https://www.iieta.org/journals/i2m/paper/10.18280/i2m.180311	Instrumentation Measure Metrologie. Scopus Q4
24	Determination Characteristic and Classification the Types of Orange Using UV-Vis	Vol.18,No.4, 5 oktober 2019, PP.413-410. https://doi.org/10.18280/12m.1800411 https://www.iieta.org/journals/i2m/paper/10.18280/i2m.180411	Instrumentation Measure Metrologie. Scopus Q4

	Spectrophotometer by K-Nearest Neighbor Algorithm		
25	Remote Control of Room Lights and Coolers Automation System SMS Based	Vol.52, No.4, Agust 2019, PP.425-428. https://doi.org/10.18280/jesa.520413 . https://www.iieta.org/journals/jesa/paper/10.18280/jesa.520413	Journal Europeen des Systemes Automatises. Scopus Q3.
26	Breast Cancer Clusterization Using Physical Parameters and Support Vector Machine Methods	Vol. 14, 2020, no. 17, 831 - 842 HIKARI Ltd, www.m-hikari.com https://doi.org/10.12988/ams.2020.914286 http://www.m-hikari.com/ams/ams-2020/ams-17-20-2020/p/gunawanAMS17-20-2020.pdf	Applied Mathematical Sciences, Scopus Q4.
27	Water Flow Control System by Online Based on ATmega328P Microcontroller	Vol. 13, 2020, no. 1, 303 - 314 HIKARI Ltd, www.m-hikari.com https://doi.org/10.12988/ces.2020.91603 http://www.m-hikari.com/ces/ces2020/ces1-2020/p/gunawanCES1-2020-1.pdf	Contemporary Engineering Sciences, Scopus Q3 Thn 2020
28	Making Monitoring Device of Infusion liquid Using Proximity Photodiode as A Sensor based on Arduino UNO	Vol. 13, 2020, no. 1, 315 - 321 HIKARI Ltd, www.m-hikari.com https://doi.org/10.12988/ces.2020.91604 http://www.m-hikari.com/ces/ces2020/ces1-2020/p/gunawanCES1-2020-2.pdf	Contemporary Engineering Sciences, Thn 2020
29	FTIR Measurement of Human Energy Fields (evidence of the existence of human inner power)	Vol.20, No.3, PP.167-171, 2021. https://doi.org/10.18280/i2m.200307 Journal homepage: http://iieta.org/journals/i2m https://www.iieta.org/journals/i2m/paper/10.18280/i2m.200307	<i>Instrumentation Mesure Metrologie, Scopus Q4</i> Thn 2021
30	Design of Air Pressure Measuring Devices Using a Barometric Pressure 280 (BMP280) Sensor Based on Arduino Uno	1. Vol 21 No 1 , 2020 , 2. DOI: https://doi.org/10.24843/BF.2020.v21.i01.p03	BULETIN FISIKA, Sinta 3
31	Classification of Invasive Ductal Carcinoma (IDC) and Invasive Lobular Carcinoma (ILC) Using the Support Vector Machine (SVM) Method	Vol.16 No.6, pp. 261-271, 2022 doi: 10.12988/ams.2022.916783 http://www.m-hikari.com/ams/ams-2022/ams-5-8-2022/p/gunawanAMS5-8-2022.pdf	Applied Mathematical Sciences

32	Modeling of Water Temperature in Evaporation Pot With 7 Ds18b20 Sensors based on Atmega328 Microcontroller	Vol.6.No.1, 2022,PP. 184-193 https://lingcure.org/index.php/journal/article/view/2123 ISSN (online): 2690-103X	Linguistics and Culture Review, Special Issue On Information Communication Technology (Ict)
33	Automatic Double Visor Helmet Design Based Arduino Nano	Vol. 11 Issue 1, January 2022 https://www.ijsr.net/get_abstract.php?paper_id=SR22112180518	International Journal of Science and Research (IJSR)
34	Can the Physical Parameters with the Support Vector Machine (SVM) Method Able to Classify Benign and Malignant Breast Cancer?	Vol.14, No.4, PP. 8-20, 2022 https://journalajrcos.com/index.php/AJRCOS/article/view/288/575	Asian Journal of Research in Computer Science
35	The System of Motor Vehicle Engine Racing Limit Control System Based on Oil Condition Level Based on ATmega328 Microcontroller	Vol.23, No.9, PP. 13-20, 2022 https://journaljerr.com/index.php/JERR/article/view/744	Journal of Engineering Research and Reports
36	Design of Automatic Door Lock Based on ATMEGA328P Microcontroller with MLX90614ESF DCI and HC-SR04 Sensors	Vol.23, No.10, PP 48-56, 2022 https://journaljerr.com/index.php/JERR/article/view/751	Journal of Engineering Research and Reports
37	Design and Manufacture of Radiosonde Based on Arduino Pro Mini Using BME280 Sensor	Vol 23, No. 12, Page 1-9, 2022 https://journaljerr.com/index.php/JERR/article/view/758	Journal of Engineering Research and Reports
38	Classification and Segmentation of Brain Tumor Using EfficientNet-B7 and U-Net	Volume 15, Issue 3, Page 1-9, 2023; Article no.AJRCOS.97252 ISSN: 2581-8260 http://eprints.eastindiaarchive.com/id/eprint/543/	Asian Journal of Research in Computer Science
39	Analysis of Acceptance of Radiation Doses for Radiation Workers in the Radiology Facility	Volume 21, Issue 5, Page 13-19, 2023; Article no.AJMAH.97301 ISSN: 2456-8414 http://stm.granthalibrary.com/id/eprint/377/	Asian Journal of Medicine and Health

	of Bali Mandara Hospital		
40	A Hybrid Method of Backpropagation and Particle Swarm Optimization for Enhancing Accuracy Performance	Volume 42, Issue 6, Page 10-18, 2023; Article no.CJAST.97654 ISSN: 2457-1024 https://journalcjast.com/index.php/CJAST/article/view/4072	Current Journal of Applied Science and Technology
41	Analysis of Radiation Dose Distribution in Nasopharyngeal and Organ Cancer Cases at Risk with Linear Accelerator Radiotherapy 6 MV Photon Energy Using the IMRT Technique at Prof. Hospital. Dr. I. G. N. G. Ngoerah	Volume 21, Issue 8, Page 55-61, 2023; Article no.AJMAH.99814 ISSN: 2456-8414 https://journalajmah.com/index.php/AJMAH/article/view/838	Asian Journal of Medicine and Health
42	Analysis of Radiation Dose Distribution and Organs at Risk in Breast Cancer Using Intensity Modulated Radiation Therapy Technique on A Linear Accelerator at RSUP Prof. Dr. I.G.N.G. Ngoerah	Volume 21, Issue 8, Page 70-79, 2023; Article no.AJMAH.99899 ISSN: 2456-8414 http://eprints.openoarchives.com/id/eprint/1648/	Asian Journal of Medicine and Health
43	Obstacle Detection Stick for the Visually Impaired Using HC-SR04 Ultrasonic Sensor and Arduino Nano Microcontroller-based Raindrop Sensor	Volume 25, Issue 3, Page 1-6, 2023; Article no.JERR.99935 ISSN: 2582-2926 https://doi.org/10.9734/jerr/2023/v25i3886 http://eprints.oastmlibrary.com/id/eprint/951/	Journal of Engineering Research and Reports
44	Study of Maximum Average Wave Height Distribution in the Southern Waters of Java Island during the Period 2010-2021	Volume 5, Issue 1, Page 48-58, 2023; Article no.IAARJ.99151	International Astronomy and Astrophysics Research Journal
45	Evaluation Of Groundwater Availability For Rice During Period 2018-2022 In Tuban Regency, East Java	Volume 6, Issue 2, Page 44-54, 2023; Article no.AJGR.102445 ISSN: 2582-2985 DOI: 10.9734/AJGR/2023/v6i2181	Asian Journal Of Geographical Research
46	Comparative Analysis Of Sentinel-3 And	Volume 7, Issue 3, Page 15-24, 2023; Article no.AJR2P.102281 ISSN: 2582-5992	Asian Journal Of Research And

	Terra MODIS Satellite Images For Air Temperature Observation In Denpasar Area	DOI: 10.9734/AJR2P/2023/v7i3141	Reviews In Physics
47	Wedge Filter Variation on Wedge Factor in Patients Cancer Breast in Sub Installation Radiotherapy RSUP Prof. Dr. I.G.N.G Ngoerah	Volume 21, Issue 10, Page 233-240, 2023; Article no.AJMAH.104421 ISSN: 2456-8414. https://rsdfwk3323.s3.ap-southeast-1.amazonaws.com/Purwaningrum21102023AJMAH104421.pdf	Asian Journal of Medicine and Health
48	Compliance Test of Percentage Depth Dose (PDD) Using LINAC Machine Brand Electa Precise Against American Association of Physicists in Medicine (AAPM) PDD With Electron Beam Energy Variation at Radiotherapy Installation RSUP Prof. Ngoerah in Denpasar	Volume 21, Issue 10, Page 226-232, 2023; Article no.AJMAH.104429 ISSN: 2456-8414. https://rsdfwk3323.s3.ap-southeast-1.amazonaws.com/Gunawan21102023AJMAH104429.pdf	Asian Journal of Medicine and Health
49	Study The Effect Of Substitution Of Rare Earth Elements On Crystallization And Magnetization Of Bct	Vol. 23, Issue-02, 2023 pp.35-43, ISSN: 1001-5493. https://www.lzjhyxf.cn/abstract-2023/2-35.php	ION EXCHANGE AND ADSORPTION

1. Experience of oral submission of papers at scientific meetings/seminars in the last 5 years

No	Name of Scientific Meeting/Seminar	Scientific Article Title	Time and Place
1	SENASTEK National Seminar 2014	Calculation of the value of physical magnitude of mammography type histopathology infiltrating ductal carcinoma (idc) and infiltrating lobular carcinoma (ilc).	18-19 September 2014, Universitas Udayana
2	SFN National Seminar 2014	Biomagnetic Utilization to Inhibit the Growth of ETEC (<i>Enterotoxigenic Escherichia coli</i>) Bacterial Cells	16-17 October 2014
3	SENASTEK National Seminar 2015	Calculation of the physical magnitude value of the film from x-ray mammography of malignant lesions and benign lesions of breast cancer.	29-30 October 2015, at Hotel Patrajasa Kuta Bali
4	SENASTEK National Seminar 2016	Determination of the Range of Physical Magnitude Values of Film X-ray Mammography Types of <i>Birads1</i> , <i>Birads2</i> , <i>Birads3</i> , <i>Birads4</i> and <i>Birads5</i> Breast Tumors.	15-16 December 2016, at Hotel Patrajasa Kuta Bali
5	Seminar nasional SNATIA 2017	Determination of the Range of Physical Magnitude of Film from X-ray Mammography Types <i>C1</i> , <i>C2</i> , <i>C3</i> , <i>C4</i> and <i>C5</i> Breast Tumors.	28-29 Juli 2017, jl. Prabu udayana 100 unud

6	Seminar nasional SAINTEK 2017	Automatic detection of histopathology type invasive ductal carcinoma (IDC) and invasive lobular carcinoma (ILC) on mammogram	21 October 2017, Gedung Pasca Sarjana Unud
7	SENASTEK national seminar 2017	Histopathological classification of carcinoma using k-nearest neighbourhood method	15-16 December 2017, at Hotel Patrajasa Kuta Bali
8	Seminar International ICOSTH 2018	Early Grade Detection of Breast Cancer Using the K-Nearest Neighbor Method	22-23 October 2018, at Hotel Patrajasa Kuta Bali
9	Seminar International ICW 2018	Classification of Breast Cancer Grades Using Physical Parameters and K-Nearest Neighbor Method	18-21 September 2018 at Hotel Ambarukmo Yogyakarta
10	Keynote speaker	Saintek 2020	6 November 2020 by FMIPA UNUD.
11	SENASTEK National Seminar 2020	Normal-Abnormal Classification of Breast Cancer Using Support Vector Machine Method	11-13 November 2020
12	SENASTEK National Seminar 2021	Classification of Invasive Ductal Carcinoma (IDC) – Invasive Lobular Carcinoma (ILC) Breast Cancer Using Support Vector Machine (SVM) Method	24-26 Nov 2021

13	Keynote Speaker	In Annual Nuclear Safety seminar 2022	24 Agustus 2022 BAPETS
14	SENASTEK National Seminar 2022	Utilization of Physical Parameters to Classify Benign-Malignant Breast Cancer Using <i>Support Vector Machine (SVM) Method</i>	29 Nov to 1 Dec 2022
15	Narasumber	Udayana University Intellectual Property Guidelines	24 February 2023, Hotel Saranam, Baturiti Tabanan

1. Book Writing Experience in the Last 5 Years

No	Book Title	Year	Number of Pages	Publisher
1	Pengolahan Citra Mammografi	2016	243	Publisher: Teknosain, PT. Graha Ilmu Yogyakarta, ISBN: 978-602-73914-3-7, 2016
2	Learn Physics Using Logic	2016	108	Publisher : Innosain, PT. Graha Ilmu Yogyakarta, ISBN: 978-602-72999-8-6, 2016
3	Theory and Practice of Digital Principles	2021	100	Publisher: Teknosain, PT. Graha Ilmu Yogyakarta, ISBN: 978-623-6433-21-8, 2021
4	Multivariate from Statistical Parameter, Non Parameter	2023	272	Publisher: Mathematics PT. Graha Ilmu Yogyakarta, ISBN:978-602-5966-36-1

5	Techniques and Innovation in Engineering Research, “Design of Radiosonde Based on Arduino Pro Mini Using BME280 Sensor”	2023	184	Penerbit: BP International, India. Jilid 5 ISBN:978-81-19102-04-4 (print) ISBN: 978-81-19102-05-1 (eBook) DOI: 10.9734/bpi/tair/v5
6	Research and Applications Towards Mathematics and Computer Science, “Classification and Contour Detection of Brain Tumors on Magnetic Resonance Imaging (MRI) Images Using Machine Learning Algorithms with Convolutional Neural Network and Computer Vision Methods”	2023	163	Penerbit: BP International, India ISBN: 978-81-19217-73-1 (Print) ISBN: 978-81-19217-81-6 (eBook) DOI: 10.9734/bpi/ratmcs/v1
7	Emerging Issues in Environment, Geography and Earth Science “Analysis Of The Maximum Average Wave Distribution Map In The Southern Waters Of Java Island During The Period 2010-2021”	2023	158	Penerbit:BP International, India Print ISBN: 978-81-19761-74-6, eBook ISBN: 978-81-19761-19-7

1. Experience of IPR Acquisition in the Last 5-10 Years

No	Judul / Tema HKI	Tahun	Jenis	Nomer P/ID
1	Determination of the stage of ca mamma using the physical magnitude of the film resulting from mammography.	2013	Paten	Application Number P00201300328 No. Publikasi : 2014/04346 IDP: 000054210
2	Histopathological Determination of Ca Mamma Using Physical Magnitude of Mammography Results	2013	Paten	Application Number P 00201300327 No. Publikasi : 2014/04558 IDP: 000048703

3	Method of determining <i>contralateral breast cancer</i> health condition using physical magnitude of mammography film.	2014	Paten	Application Number : P00201407240. No. Publikasi : 2015/02080. IDP:000050217
4	Method of determining malignant <i>lesions (carcinoma)</i> and benign lesions (<i>benign</i>) of breast cancer (<i>ca mamma</i>) using physical film quantities from mammography x-ray photos	2015	Paten	Application Number : P00201508280. No. Publikasi: 2017/00078
5	Physics Learning Books Using Logic	2016	HKI	No. C16201602177, 10 Juni 2016. No. Pencatatan : 079788
6	Buku Pengolahan Citra Mammografi	2016	HKI	No. C16201602176, 10 Juni 2016. No. Pencatatan : 079787
7	Method of determining the variant of <i>breast tumor birads</i> using the physical size of the film from mammography x-ray photos	2016	Paten	Application Number : P00201605923 No.Publikasi:2018/03250
8	Method of determining Invasive Lobulary Carcinoma and Invasive Ductal Carcinoma in breast cancer using the distance of the nearest neighbor	2017	Paten	Application Number : P00201704881 IDP: 000063384
9	Utilization of physical parameters to determine the grade of breast cancer using the closest neighbor distance method	2018	Paten	Application Number : P00201800209
10	Early Detection of Breast Cancer Using <i>Support Vector Machine (SVM) Method</i>	2020	Paten	Application Number : P00202006271
11	Classification of Invasive Ductal Carcinoma and Invasive Lobuler Carcinoma Using Support Vector Machine Method	2021	Paten	Application Number : P00202105325
12	Book of Theory and Practice of Digital Principles	2021	HAKI	Application Number EC00202163933

				No. Pencatatan: 000287144
13	Motor Vehicle Engine Speed Limit Control System Based on Oil Condition Level Based on Atmega328 Microcontroller	2022	HAKI	EC00202202304, 11 Januari 2022
14	Remote Control of SMS-Based Automatic System of Lights and Air Conditioners	2022	HAKI	EC00202206287, 26 Januari 2022
15	Automatic Door Lock Design Based On Atmega328P Microcontroller With DCI Mlx90614ESF And HC-SR04 Sensor	2022	HAKI	EC00202202306, 11 Januari 2022
16	Arduino Nano Based Automatic Double Visor Helmet Design	2022	HAKI	EC00202202305, 11 Januari 2022
17	Design and manufacture of Arduino Pro Mini based radiosonde using BME280 sensor	2022	HAKI	EC00202293195, 23 November 2022
18	Are physical parameters with the Support Vector Machine (SVM) method able to classify Benign and Malignant?	2022	HAKI	EC00202265406, 15 September 2022
19	Classification and segmentation of brain tumors using EfficientNetB7 and UNet	2023	HAKI	EC00202330922, 20 April 2023
20	Identification of large waves in the southern waters of Java Island for the period 2010-2021	2023	HAKI	EC00202330921, 20 April 2023
21	Determination of radiation dose received by radiation workers at the radiology installation of Bali Mandara Hospital based on differences in work professions	2023	HAKI	EC00202319563, 8 Maret 2023
22	Comparison of the distribution of right and left breast cancer doses against OAR using the IMRT technique on the Precise brand LINAC aircraft at the Radiotherapy Sub-Installation of RSUP Prof. Dr. I.G.N.G. Ngoerah	2023	HAKI	EC00202334727, 11 Mei 2023
23	Utilization of HC-SR04 ultrasonic sensor and raindrop sensor for blind sticks	2023	HAKI	EC00202334728, 11 Mei 2023
24	The use of homogeneity index (HI), conformity index (CI) and maximum radiation dose values in At Risk (OAR) organs to calculate the distribution of radiation doses of nasopharyngeal cancer and at risk organs	2023	HAKI	EC00202334726, 11 Mei 2023

Denpasar, 10 November 2023
Pengusul

A handwritten signature in blue ink, consisting of a horizontal line with a loop and a vertical stroke crossing it.

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