



Avinashilingam Institute for Home Science and Higher Education for Women

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 Coimbatore - 641 043, Tamil Nadu, India

Department of Biomedical Instrumentation Engineering

Book Chapters 2015-2023

S. No	Name of the Author	Title of Chapter Published	Name of the Book, Publisher	Volume/ pp./Year	ISBN
1.	E. Smily Jeya Jothi, J. Anitha D. Jude Hemanth	Keratoconus Classification using Feature Selection and Machine Learning Approach	Communications in Computer and Information Science, Book series	Volume 1818, pp. 39–51, 2023	978-3-031-34222-6
2.	E. Smily Jeya Jothi, J. Anitha, Jemima Priyadharshini D. Jude Hemanth	Deep Learning based Obstructive Sleep Apnea Detection for E-health Applications	Communications in Computer and Information Science, Book series, Springer	Volume 1666, pp.1-11, 2023	978-3-031-22950-3
3.	S. Pavithra, D.Pavithra Dr. R Vanithamani, Dr. Judith Justin	Digital Twin Applications and Challenges in Healthcare	Digital Twin Technology: Fundamentals and Applications, Wiley-Scrivener	Chapter 7, pp. 111–124, 2022	978-1-119-84220-0
4.	Janasruti U., Kavya S., Merwin A., Vanithamani.R	Deep Learning-Based Approach to Detect Leukemia, Lymphoma, and Multiple Myeloma in Bone Marrow	AI-Enabled Smart Healthcare using Biomedical Signals, IGI Global	Chapter 14, pp.259-282, 2022	978-1-668-43948-7
5.	Dhanalakshmi S., Gayathiridevi B., Kiruthika S., E Smily Jeya Jothi	PPG-Based Cardiovascular Disease Predictor Using Artificial Intelligence	Leveraging AI Technologies for Preventing and Detecting Sudden Cardiac Arrest and Death - IGI Global	Chapter 10 pp.218-239, 2022	978-1-7998-8443-9

6.	D. Monisha R. Vanithamani	Fusion Model-Based Robotic Arm Using Laboratory Virtual Instrument Engineering Workbench	Algorithms for Intelligent Systems, Book series, Springer	pp. 249–259, 2022	978-981-19-3311-0
7.	S. Menaga Dr.G.Kalaiarasi R.Vanithamani M.Nivetha	Data Analytics for Disease Prediction	Machine Learning Algorithms for Intelligent Data Analytics Technoarete publishing	Chapter 14, pp.185-202, 2022	978-93-92104-07-7
8.	S.Pavithra Dr. R.Vanithamani Dr. Judith Justin	Classification of Stages of Thyroid Nodules in Ultrasound Images using Transfer Learning Methods	Lecture Notes on Networks and Systems (LNNS) - Book Series Springer	Vol. 300, pp.241-253, 2021	978-3-030-84760-9
9.	Pavithra Suchindran Dr. R.Vanithamani Dr. Judith Justin	Breast Cancer Detection Using Random Forest Classifier	Handbook of Research on Deep Learning Based Image Analysis Under Constrained and Unconstrained Environments & IGI Global	Chapter 5, pp.85-98, 2021	978-1-7998-6690-9
10.	D.Pavithra Dr. R.Vanithamani Dr.Judith Justin	Computer-Aided Diagnosis of Knee Osteoarthritis from Radiographic Images Using Random Forest Classifier	Handbook of Research on Engineering, Business, and Healthcare Applications of Data Science and Analytics & IGI Global	Chapter 19, pp.384-400, 2021	978-1-7998-3053-5
11.	Dr. Judith Justin Dr. R. Vanithamani	Speech Enhancement using Neuro-Fuzzy Classifier	Handbook of Research on Automated Feature Engineering and Advanced Applications in Data Science & IGI Global	Chapter 9, pp.164-181, 2020	978-1-7998-6659-6
12.	V. Sangeetha Dr.Judith Justin A. Mahalakshmi	Video based Silent Speech Recognition	Lecture Notes on Data Engineering and Communications Technologies book series - Springer	pp.269-277, 2019	978-3-030-24643-3
13.	A. Mahalakshmi Dr.R.Vanithamani	RFID based Patient Record Management Information System using LabVIEW	Lecture Notes on Data Engineering and Communications Technologies book series-	pp.303-311, 2019	978-3-030-24643-3

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14.	J.Revathi J.Anitha	Automatic Diagnosis of Myocardial Infarction with Left Bundle Branch Block	Communications in Computer and Information Science book series(CCIS)-Springer	Vol. 1036, pp.235-244, 2019	978-981-13-9184-2
15.	K.Uma J.Revathi J.Anitha	Telemetry System for Early Detection of hyperbilirubinemia in neonates	TelemedicineTechnologies-AcademicPress	pp.71-87, 2019	978-0-12-816948-3
16.	D.Diana J.Revathi K.Uma A.Ramya J.Anitha	A Novel Method for Detecting Bone Contours in Hand Radiographic Images	Advances in Intelligent Systems and Computing book series (AISC)-Springer	Vol. 766, pp.293-299, 2019	978-981-13-9683-0
17.	D.Hepsiba Dr.JudithJustin	Role of Deep Neural Network in Speech Enhancement: A review	Communications in Computer and Information Science book series-Springer	pp.103-112,2019	978-981-13-9129-3
18.	A.HariPriya Dr.R.Vanithamani	Atherosclerotic Plaque Detection using Intravascular Ultrasound (IVUS)Images	Lecture Notes in Computational Vision and Biomechanics book series-Springer	pp.14-17-1425,2019	978-3-030-00665-5
19.	K.V.Archana Dr.R.Vanithamani	Diagnosis of Coronary Artery Diseases and Carotid Atherosclerosis using Intravascular Ultrasound Images	Communications in Computer and Information Science book series-Springer	pp.281-288, 2019	978-981-13-9129-3
20.	C. R. Renee Dr.R.Vanithamani R.Dhivya	Dental Caries Detection using NIR Imaging Technique	IET Digital Library	pp.1-4, 2018	978-1-78561-786-7
21.	R.Dhivya Dr.JudithJustin	Wavelet thresholding Techniques in Speech Signal Denoising	IET Digital Library	pp.1-5, 2018	978-1-78561-786-7

22.	Dr.R.Vanithamani R.Dhivya	Thyroid Nodule Classification in Medical Ultrasound Images	Advances in Intelligent Systems and Computing book series – Springer	pp.509- 514,201 7	978-3- 319- 60618- 7
23.	Dr.R.Vanithamani R.ReneeChristina	Exudates in Detection and Classification of Diabetic Retinopathy	Advances in Intelligent Systems and Computing book series – Springer	pp.252 - 261,20 17	978-3- 319- 60618- 7
24.	R.Dhivya Dr.JudithJustin	Assessment of Speech Denosing using a Perceptual Measure PESQ	Advances in Intelligent Systems and Computing book series – Springer	pp.270 - 278,20 17	978-3- 319- 60618 -7
25.	N.Premalatha	Semantic Web Technology	Computational Research Techniques in Informatics	2017	978- 93- 86388 -04-9
26.	Judith Justin Ila. Vennila	Estimation of Paralinguistic Features and Quality Analysis of Alaryngeal Voice	Advances in Intelligent Systems and Computing Book series-Springer	Vol.39 7, pp.775 -786, 2015	978- 81- 322- 2671- 0
27.	R.Dhivya Judith Justin	Performance Evaluation of a Speech Enhancement Technique using Wavelets	Advances in Intelligent Systems and Computing Book series-Springer	Vol.39 7, pp.637 -646, 2015	978- 81- 322- 2671- 0