Publications of Dr. J. Amutharaj, Professor & HoD – ISE

1. Book Publication
2. Patent Published and Granted
3. Paper Publications in Referred International Journals and Conference Publications

Books Published

Dr. J. Amutharaj co-authored a text book titled **"Full Stack Web Development"**, AASAN Publications with Dr.D.Jayasudha, Dr.G.Ganeshkumar & Prof. R. Amudha in **August 2023.**

Patents Published

1. Dr.Vijayanand S, .Dr.J.Amutharaj, Dr. Sobya D Dr. K. Janaki, Dr.Neha Singhal Dr T.Subburaj of RajaRajeswari College of Engineering, Bangalore has filed a patent titled **"Trustworthy Electronic Voting using Adjusted Block Chain Technology"** with Controller of Patents, Intellectual Property INDIA on 9th August 2021 and Published on 13th August 2021. **Name of the Applicant:** RajaRajeswari College of Engineering, #14, Ramohalli Cross,Kumbalagodu,Bangalore–560074 **Name of the Inventors :** Dr.Vijayanand S, .Dr.J.Amutharaj, Dr. Sobya D Dr. K. Janaki, Dr.Neha Singhal Dr T.Subburaj

2. Innovation Patent Granted on 25th August 2021 titled **"Dryland Agriculture and Yield Gap Analysis by Machine Learning Algorithms using IoT Sensors"** by IP Australia, Australian Government with Patent Number 2021104029.

   Name of the Inventors : Dr J Amutharaj, Dr. S Usha, Dr. J Anitha, Dr. P. Bhuvaneswari, Dr. Kamalraj T, Dr.Vijayanand S, Prof. Bhagya Lakshmi, Dr. M Gomathynayagam, Dr. I Gethzi Ahila Poornima, Prof. Pallavi C.V., Prof. Niranjan Murthy C, Dr. T Subburaj

3. Aravinthan Kalimuthu, RajaRajeswari College of Engineering, Dr.S.Vijayanand, Dr. S.Jeyabalan, Dr.R.Balakrishna, Dr. J.Amutharaj, Dr.S.Usha, Dr.C.Arun, Mr. Ummer Farook Pasha, and Mrs. K.S. Navya, has filed a patent **"HSO-BRICK AND Process for Manufacturing therof"** with Controller of Patents, Intellectual Property INDIA on 25th May 2023.

4. Prashanth A, Jayachitra S, Amutharaj J, Lavanya S, Nmaratha M, Nandankar, Praful and Kumar, R, Praveen filed a Patent titled "**An Efficient Coverage Management for Smart IoT Application"** in IP Australia, Australian Government. The patent was granted by IP Australia with the Patent Number 2021101571.

5. Dr.J.Amutharaj, M.Gomathynayagam, Dr.D.Sobya, I. Gethzi Ahila Poornima, P.Ramkumar, filed a patent titled "Surveillance Automation for Detection and

Identification of Human Behaviours", with Controller of Patents, Intellectual Property INDIA and published on 11th September 2020.

6. Ms.Bhuvana, Dr.M.Sudha, Mr. L. Maria Micheal Visuwasam, Dr. J. Amutharaj, Dr. L.Arun Raj, Mr.V.Manimaran filed a patent titled "Analysis and the Development of Intelligent App Creation with its Features" with Controller of Patents, Intellectual Property INDIA on 27th June 2020.

7. Dr.S.Usha, .Dr.J.Amutharaj, Dr. Kamalraj T, Dr.Shebha Selvam, Dr. K. Janaki, Dr.P. Bhuvaneswari, filed a patent titled Cryptographic Security of Data Transfers in Computer Systems with Controller of Patents, Intellectual Property INDIA with CFR No : 4157 on 6th February 2020.

<div align="center">Publications in Referred International Journals</div>

1. Gadde, S., Amutharaj, J., Usha, S. **"A security model to protect the isolation of medical data in the cloud using hybrid cryptography"** (2023) "Journal of Information Security and Applications, 73, art. no. 103412,https://www.scopus.com/inward/record.uri?eid=2-s2.0-8514604842 7&doi=10.1016%2fj.jisa.2022.103412&partnerID=40&md5=f9dc2236ae71acdd538940dc6e0bf7e3

DOI: 10.1016/j.jisa.2022.103412   **SCOPUS Indexed**

2. Gadde, S., Amutharaj, J., Usha, S. **"Cloud Multimedia Data Security by Optimization-Assisted Cryptographic Technique"** (2023) International Journal of Image and Graphics, art. no. 2450010, https://www.scopus.com/inward/record.uri?eid=2-s2.0- 85147163041&doi =10.1142%2fS0219467824500104&partnerID=40&md5

DOI: 10.1142/S0219467824500104   **SCOPUS Indexed**

3. Rajendran, T., Valsalan, P., Amutharaj, J., Jenifer, M., Rinesh, S., Latha G, C.P., Anitha, T. **"Hyperspectral Image Classification Model Using Squeeze and Excitation Network with Deep Learning"** (2022) Computational Intelligence and Neuroscience, 2022, art. no. 9430779, . Cited 4 times https://www.scopus.com/inward/record.uri?eid=2-s2.0 85136076268& doi=10.115 5%2f2022%2f9430779&partnerID=40&md5=8

DOI: 10.1155/2022/9430779   **SCOPUS Indexed**

4. Gadde, S., Amutharaj, J., Usha, S. "**A Hybrid Cryptography Technique for Cloud Data Security(2022)**", International Journal of Engineering Trends and Technology, 70 (11), pp. 258-267.   https://www.scopus.com/inward/record.uri?eid=2-s2.0-8514985468& doi=10.14445%2 f22315381%2fIJETT-V70I11P228&partnerID=

DOI: 10.14445/22315381/IJETT-V70I11P228   **SCOPUS-Indexed**

5. Singhal, N., Usha, S., Kirubha, Jeyabalan, S., Amutharaj. **"Integration of loT for Industry Automation using Machine Learning Technique" (2022),** International Conference on Digital Transformation and Intelligence, ICDI 2022 - Proceedings, pp. 252-257.

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DOID: 10.1109/ICDI57181.2022.10007229 **SCOPUS Indexed**

6. **Sridhar, S., Amutharaj, J.,** Valsalan, P., Arthi, B., Ramkumar, S., Mathupriya, S., Rajendran, T., Waji, Y.A. "**A Torn ACL Mapping in Knee MRI Images Using Deep Convolution Neural Network with Inception-v3(2022) "** Journal of Healthcare Engineering, 2022, art. no. 7872500, https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124774718&doi=10.1155%2f2022 %2f7872500&partnerID=40&md5=57cef44bea4ddead280f5db5d0f8597b

DOI: 10.1155/2022/7872500 **SCOPUS Indexed**

7. Sudhan, M.B., Sinthuja, M., Pravinth Raja, S., **Amutharaj, J**., Charlyn Pushpa Latha, G., Sheeba Rachel, S., Anitha, T., Rajendran, T., Waji, Y.A. **"Segmentation and Classification of Glaucoma Using U-Net with Deep Learning Model" (2022),** Journal of Healthcare Engineering, 2022, art. no. 1601354, .https://www.scopus.com/inward/record.uri?eid=2-s2.0 85125431511&doi=10.115 5%2f2022%2f1601354&partnerID=40&md5=2680fa5034d897b074428dd063197516

DOI: 10.1155/2022/1601354 **Scopus Indexed**

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10. Sridhar, S.K., Jeyabalan, S., **Amutharaj, J. Optimization of smart mobile device work time using composite offload decision algorithmic approach** (2021) Indian Journal of Computer Science and Engineering, 12 (4), pp. 899-909. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85113504713&doi=10.21817%2fin djcse%2f2021%2fv12i4%2f211204119&

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12. Swetha Gadde, **Amutharaj, J**., Usha, S." **Data Security on Cloud by Cryptographic Methods Using Machine Learning Techniques" (2022),** International Journal of Computer Science and Network Security,IJCSNS,Vol.22 No.5   **Scopus Indexed**

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14. Dr. J Amutharaj, Dr.Neha Singhal, Dhawalashree B K, Arpitha G, Shreyas M, Vishranth K H, **"Real-Time Anomaly Detection Using Video SurvellanceFor Enhancing The Security", (2023),** International Journal of Advance Research and Innovative Ideas in Education, 2023 Vol-9 Issue-3 2023 IJARIIE-ISSN (O)-2395-4396

15. Dr. J. Amuthara , Chandana P, Deepashree S Rannore, **"Coronavirus Detection Using Machine Learning" (2022) I**nternational Journal of Research And Analytical Reviews(IJRAR). IJRAR.org 2022, Vol: 9, Issue: 4, October 2022 www.ijrar.org (E-ISSN: 2348-1269, P-ISSN: 2349-5138)

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