Faculty Profile

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Patent Published:

1. Published Patent: Akshaya Jaishankar, **Angeline Kirubha Samuel Paulraj,** Patent Application No. **202041040316** Title: "A NON-INVASIVE DEVICE FOR MONITORING BILIRUBIN LEVEL AND A METHOD THEREOF", Published on 16th October 2020, Page No. 53506.

Patent Filed:

1. Patent Filed: Keren Evangeline Isaac Boniface Michael, **Angeline Kirubha Samuel Paulraj**, Glory Precious Jeeva Kumar, Patent Application No. 202041043243, Title: "A SYSTEM FOR ANALYZING HISTOPATHOLOGICAL IMAGES AND A METHOD THEREOF" Filed on 05th October 2020.

Journal Publications:

1. S.S Aarthi@Priyadarshini, S. P. Angeline Kirubha., "Development of patient specific 3D printed mandible implant", IOP Conf. Series: Materials Science and Engineering 912 (Sep 2020) 062020; doi:10.1088/1757-899X/912/6/062020. **SNIP: 0.573. (Scopus Indexed)**

2. P. Muthu., **S. P. Angeline Kirubha.,** " Computational intelligence on image classification methods for microscopic image data", Journal of Ambient Intelligence and Humanized Computing, August 2020, **Springer, Impact Factor 4.594**. https://doi.org/10.1007/s12652-020-02406-z,

3. **S.P. Angeline Kirubha** ; T Akash ; Bahni Roy ; S.S. Aarthi Priyatharshini, "Infrared Thermography for Correlating Blood Pressure and Temperature", 2020 International Conference on Communication and Signal Processing (ICCSP), Sep 2020,Page(s): 0415 - 0421 IEEE, DOI: 10.1109/ICCSP48568.2020.9182223.

4. K Keerthana ; R Yamini ; N Dhesigan ; N Bala gangadharan ; **S. P. Angeline kirubha,** " Smart Lifeguarding Vest for Military Purpose", 2020 International

Conference on Communication and Signal Processing (ICCSP), Sep 2020, Page(s): 0637 - 0639 IEEE, DOI: 10.1109/ICCSP48568.2020.9182321

5. Keren Evangeline. I, J. Glory Precious, N. Pazhanivel, **S. P. Angeline Kirubha,** "Automatic Detection and Counting of Lymphocytes from Immunohistochemistry Cancer Images using Deep learning", (July 2020), Journal of Medical and Biological Engineering, **Springer, Impact Factor 1.173.** https://link.springer.com/article/10.1007/s40846-020-00545-4

6. S.S Aarthi@Priyadarshini, **S. P. Angeline Kirubha., "** Patient-specific 3D-Printed Mandible Implant made of PLA polymer material in different physiological loading condition**",** (July2020), Journal of SeyBold Report, Volume15, Issue No.6, pp. 107-114, ISSN NO: 1533-9211. **(Scopus Indexed).** https://seyboldjournal.com/2020-issue-6/

7. Tavishi Singh, **S. P. Angeline Kirubha,** Saswati Dhal, *" Spectroscopic study of human saliva sample by ATR-FTIR Spectroscopy for detection of diabetes mellitus",* (July2020), Journal of SeyBold Report, Volume15, Issue No.7, pp. 201-209, ISSN NO: 1533-9211. **(Scopus Indexed).** https://seyboldjournal.com/2020-issue-7/#sno22

8. P. Muthu., **S. P. Angeline Kirubha.,** "Artificial intelligence proficient systems with neural network machine learning algorithms in nanoparticle size prediction application", (2019) International Journal of Pharmaceutical Research, Volume 11, pp. 314-322, **SNIP: 0.073. (Elsevier - Scopus Indexed)**

9. P. Muthu., **S. P. Angeline Kirubha**., "Preparation, characterization and biological test of biodegradable composite tissue engineering scaffold", (2019) International Journal of Pharmaceutical Research, Volume 11, pp. 307-313, **SNIP: 0.073. (Elsevier - Scopus Indexed)**

10. V. Madhubala, T. Kalaivani,, **Angeline Kirubha**, Joy Sebastian Prakash, Venkatesan Manigandan, Hanuma Kumar Dara, "Study of structural and magnetic properties of hydro/solvothermally synthesized α-Fe2O3 nanoparticles and its toxicity assessment in zebrafish embryos", Applied Surface Science, (2019), Volume 494, pp. 391-400, **(Elsevier - Impact factor: 5.155 – SCI)**

11. Keren Evangeline, **S.P. Angeline Kirubha**, D. Raja, "Finite element analysis of biconcave fracture in thoracolumbar region of spine" (2019) Journal of International Pharmaceutical Research, Volume 46(4), pp. 97-102, **SNIP: 0.035. (Elsevier - Scopus Indexed)**

12. **S.P.Angeline Kirubha,** Alankruti Rajput, "Enhancement of thermal imaging by iron oxide nanoparticle – Preliminary study", Biocatalysis and agricultural biotechnology, (2019), Volume 17, pp. 352-360, **SNIP: 0.887. (Elsevier - Scopus Indexed)**

13. **S.P. Angeline Kirubha,*** , M. Anburajana , B. Venkataramanb , M. Menaka, "A case study on asymmetrical texture features comparison of breast thermogram and mammogram in normal and breast cancer subject", Biocatalysis and agricultural biotechnology, (2018), Volume 15, pp. 390-401. **SNIP: 0.887. (Elsevier -Scopus Indexed)**

14. I Keren Evangel**ine, S P Angeline Kirubha,** D Raja**, "**A biomechanical study of T12-L2 in thoracolumbar region of spine affected by tuberculosis", IOP Conf. Series: Materials Science and Engineering, (2018), 402, 012089, DOI:10.1088/1757-899X/402/1/012089. **SNIP: 0.573. (Scopus Indexed)**

15. Karthika durairaj, **Angeline Kirubha S. P,** Nilkantha "Identification of stenosis in coronary arteries using velocity and wall shear stress analysis", IEEE sponsored International Conference on Electronics, Communication and Aerospace Technology (ICECA 2017), signal processing (ICCSP), at RVS Technical campus, Coimbatore, April 20th to 22nd , 2017. **Indexed in IEEE explore, DOI:** 10.1109/ICECA.2017.8203597.
https://ieeexplore.ieee.org/document/8203597/

16. **Angeline S.P. Kirubha.,** Minnita Rachel., Micheal Anburajan., "Automated multimodal segmentation of an abnormal breast mass in mammogram", The Institution of Mechanical Engineers Proceeding: Journal of Engineering in Medicine, (2016), pp.1-16., DOI: 10.1177/0954411916638380**, (Indexed in SCI and Scopus & its Impact factor: 1.124).**

17. Alankruti Rajput, **S. P. Angeline Kirubha,** "Biocompatible iron oxide nanoparticles for enhancement of MRI, thermography and thermal ablation, International Conference on communication and signal processing (ICCSP), **Indexed in IEEE explore**, 2016, pp. 0128 – 0132, **ISBN:** 978-1-4673-8549-7 **DOI:** 10.1109/ICCSP.2016.7754108.
https://ieeexplore.ieee.org/document/7754108/.

18. **Angeline S.P. Kirubha.,** Micheal Anburajan., "Classification of abnormal breast neoplasm from mammogram images", Vol. 14 (2016), pp.66-74., CIC 2016 Special Issue International Journal of Computer Science and Information Security (IJCSIS), https://sites.google.com/site/ijcsis/, ISSN 1947-5500.

19. **Angeline S.P. Kirubha.,** M. Anburajan., B. Venkataraman., M. Menaka., "Comparison of PET–CT and thermography with breast biopsy in evaluation of breast cancer: A case study", Infrared Physics & Technology, **Elsevier**, 73 (2015), pp.115–125. http://dx.doi.org/10.1016/j.infrared.2015.09.008 - **Impact factor: 1.851, SNIP: 1.140, Scopus indexed.**

20. Manju Gobinath., **Angeline Kirubha S.P.,** "Real Time Monitoring of Posture to Improve Ergonomics" , Journal of Biomedical Engineering and Medical Imaging, Volume 2, Issue 1, ISSN 2055-1266, (2015), DOI: 10.14738/jbemi.22.1160.

21. **S. P. Angeline Kirubha.,** M. Anburajan., B. Venkataraman, R., Akila, D., Sharath., Baldev Raj., "Evaluation of Mammary Cancer in 7,12-Dimethylbenz(a) anthracene-Induced Wister Rats by Asymmetrical Temperature Distribution Analysis Using thermography: A Comparison with Serum CEA Levels and Histopathology", Journal of Biomedicine and Biotechnology, Volume 2012, Article ID 786417, 11 pages doi:10.1155/2012/786417, – **Impact Factor: 2.583, SCI expanded, scopus,** http://www.hindawi.com/journals/jbb/2012/786417/.

22. Ranjitha Rebecca Jeevan, E.Vijayaragavan, **Angeline Kirubha**, "Dimensional modeling of an ankle foot orthosis for clubfoot deformity", International Journal of Biomedical Research, 2[3], 2011, pp.171-180, DOI: 10.7439/ijbr.v2i3.90.

23. Tincey Varkey., V. Prabhu., Ravichandran., Gajendran., **S.P. Angeline Kirubha.,** "Design And Implementation Of An Applanation Tonometer Using Hollow Shaft Potentiometer", International Journal Of Biomedical Engineering And Consumer Health Informatics, Volume 3, Number 2, 2011, ISSN: 0973-6727,pp. 87-94.

24. **Angeline Kirubha S.P.,** Debolina, M. Anburajan "Quantum dots for Bioimaging: A Review" in Proceedings of National Symposium on Advanced Medical Imaging (NSAMI'09), Proceedings Published by: Excel India Publishers, New Delhi, pp. 53-57, ISBN: 978-93-80043-31-9.

25. **Angeline Kirubha S.P,** M. Anburajan, 'Spectrometric Techniques for Diagnosis of Breast Cancer'', IEEE International Conference on Computer Communications and Informatics, Indexed in IEEE explore; pp.1-4, P-ISBN: 978-1-4577-1580-8, **DOI:** 10.1109/ICCCI.2012.6158812.

Conference Presentations:

1. Tavishi Singh, **S. P. Angeline Kirubha,** Saswati Dhal, *" Spectroscopic study of human saliva sample by ATR-FTIR Spectroscopy for detection of diabetes mellitus",* Won First place in Presentation, International Web Conference on recent advancements in Biomedical engineering (INCRABE'20), Bharath Institute of Science and Technology, 3rd July 2020.

2. Anusha Annamalai, Rajeswari Selvaraj, Haritha Udhayn, **S. P. Angeline Kirubha,** "*Mammogram Segmentation using Active Contour Segmentation'',* International Web Conference on recent advancements in Biomedical engineering (INCRABE'20), Bharath Institute of Science and Technology, 3rd July 2020.

3. Kirthana Sivakumar, Priyadarshni D, Darshan K. M, **S. P. Angeline Kirubha,** *"Segmentation of Soft tissue sarcoma",* Won Second place in Presentation, International Web Conference on recent advancements in Biomedical engineering (INCRABE'20), Bharath Institute of Science and Technology, 3rd July 2020.

4. Akshaya J, Vijitha Venugopal, K . Ragadeepthi, **Angeline Kirubha S. P.,** "Non-Invasive Bilirubin Sensor for Continuous Monitoring and Automatic Control of Phototherapy for Infant Jaundice Treatment", NeoCORE – 2020 – Neonatal Conference on Research and Expert Talks, Sri Ramachandra Institute of Higher Education and Research, Chennai, 14-15th March 2020.

5. Ms. S.S.Aarthi Priyatharshini, Dr.S.P.Angeline Kirubha, "Development of patient-specific 3D printed mandible implant" in the 3rd International Conference on advances in mechanical engineering (ICAME 2020), from 24.02.2020 to 29.02.2020, Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai.

6. Keren Evangeline. I, J. Glory Precious, Pazhanivel. N, **S. P. Angeline Kirubha,** "Counting of Lymphocytes using faster RCNN approach", International conference on Instrumentation, MEMS, and Biosensing technology, 13 – Feb-2020, SRMIST

7. J. Glory Precious, Keren Evangeline. I, **S. P. Angeline Kirubha,** " Diagnosis of brain tumor using blended Deep neural network and supervised machine learning Techniques", International conference on Instrumentation, MEMS, and Biosensing technology", 13 – Feb-2020, SRMIST

8. Karthik K, **S. P. Angeline Kirubha**, "IOT based smart infant incubator", International conference on emerging technique in engineering technology and management – 2019, Rathinam Technical campus, Coimbatore, 23rd March 2019.

9. Akshaya , Yamini, **S. P. Angeline Kirubha**, "Infrared thermographic analysis of interrelation between blood pressure and temperature of forearm for normal, high and low BP subjects", Fifth international conference on biosignals, images and instrumentation, SSN college of engineering, March 14-15 2019.

10. Akash T, Bahni Roy, **S.P. Angeline Kirubha,** "Infrared thermography for correlating blood pressure and temperature", International conference on Materials, Applied physics and Engineering (ICMAE), 3rd and 4th June 2018.

11. Keren Evangeline, **S. P. Angeline Kirubha,** D. Raja, "A Biomechanical study of T12-L2 in thoracolumbar region of spine affected by tuberculosis", International Conference on Advances in Mechanical Engineering, at SRM Institute of Science and Technology, 23rd March 2018.

12. Mohammed Riyaz, M. Swadhi Priya, B. Aishwarya, A. Asif Mohammed, Oinam Robita Chanu, **S.P.Angeline Khirubha,** "Study of the mobile phone radiation effect on the facial region using headphone and Bluetooth modules", International Conference on Bioengineering on health and environment", at Sathyabama Institute of Science and Technology, Chennai, 8-10th Jan 2018.

13. **Angeline Kirubha S.P,** Alankruti Rajput, "Enhancement of thermal imaging by iron oxide nanoparticle – Preliminary study", International Conference on Bioengineering on health and environment", at Sathyabama Institute of Science and Technology, Chennai, 8-10th Jan 2018.

14. Karthika durairaj, **Angeline Kirubha S. P,** "Identification of stenosis in coronary arteries using velocity and wall shear stress analysis", IEEE sponsored International Conference on Electronics, Communication and Aerospace Technology (ICECA 2017), signal processing (ICCSP), at RVS Technical campus, Coimbatore, April 20th to 22nd , 2017.

15. Alankruti Rajput, **S. P. Angeline Kirubha,** "Biocompatible iron oxide nanoparticles for enhancement of MRI, thermography and thermal ablation, International Conference on communication and signal processing (ICCSP), Indexed in IEEE explore, 2016, pp. 0128 – 0132, ISBN: 978-1-4673-8549-7 DOI: 10.1109/ICCSP.2016.7754108.

16. Sonal Raju, **Angeline Kirubha S.P.,** "Uninterrupted wireless patient monitoring on laptop or display", International conference on Advanced electrical and electronics engineering (ICAEEE), May 12th, 2013.

Working papers:

1. J. Glory Precious, Keren Evangeline. I, **S. P. Angeline Kirubha,** "Automatic brain tumour classification in 2D MRI images using integrated deep learning and supervised machine learning techniques" (Communicated)

2. A.Udayakumar, R. Raghavi, R. Reshma, S. P. Angeline Kirubha, "Non-invasive assessment of fractional flow reserve using computational fluid dynamics modelling from coronary angiography images" (2019), International Journal of Medical engineering and Informatics, Inderscience Publications (Accepted)

3. Akshaya, Yamini, **S. P. Angeline Kirubha**, "Infrared thermographic analysis of interrelation between blood pressure and temperature of forearm for normal, high and low BP subjects". – Communicated