

BII – Clinical Data Analytics & Radiomics Publications

**** (Publications sorted: Newest to Oldest)**

1.	Bhanu Prakash KN, Arvind CS, Yeow LY, Chen WX, Lim WS, Tan CH. CAFT: A Deep Learning based Comprehensive Abdominal Fat Analysis Tool for Large Cohort Studies . MAGMA, 2021.
2.	Geetha Soujanya Chilla, Yeow Ling Yun, Qian Hui Chew, Kang Sim, Bhanu Prakash KN. Machine learning classification of schizophrenia patients and healthy controls using diverse neuroanatomical markers and Ensemble methods. Scientific Reports (Submitted).
3.	Che Mohd Nassir CMN, Damodaran T, Yusof SR, Norazit A, Chilla G, Huen I, Bhanu Prakash KN, Mohamed Ibrahim N, Mustapha M. Aberrant Neurogliovascular Unit Dynamics in Cerebral Small Vessel Disease: A Rheological Clue to Vascular Parkinsonism . Pharmaceutics 2021, 13, 1207.
4.	Ren BX, Huen I, Wu ZJ, Wang H, Duan MY, Guenther I, Bhanu Prakash KN, Tang FR. Early Postnatal Irradiation-induced Age-dependent Changes in Adult Mouse Brain: MRI based Characterization . BMC Neuroscience, 22, Article number: 28 (2021).
5.	Gawali M , Arvind CS, Suryavanshi S, Madaan H, Gaikwad A, Bhanu Prakash KN, Kulkarni V, Pant A. Comparison of Privacy-Preserving Distributed Deep Learning Methods in Healthcare . arXiv:2012.12591, 2021.
6.	Smarajit Chakraborty, Ong WK, Yau WWY, Zhou ZH, Bhanu Prakash KN, Toh SA, Han WP, Yen PM, Shigeki Sugii. CD10 marks non-canonical PPARγ-independent adipocyte maturation and browning potential of adipose-derived stem cells . Stem Cell Research & Therapy volume 12, Article number: 109 (2021)
7.	Yuan C, Chakraborty S, Chitta KK, Subramanian S, Lim TE, Han W, Bhanu Prakash KN, Sugii S. Fast Adipogenesis Tracking System (FATS)—a robust, high-throughput, automation-ready adipogenesis quantification technique . Stem Cell Res Ther. 2019; 10: 38. Published online 2019 Jan 22. doi: 10.1186/s13287-019-1141-0
8.	Lum FM, Zhang W, Lim KC, Malleret B, Teo TH, Koh JJ, Lee KJ, Chua TK, Kam YW, Yee WX, Huen I, Tan JLL, Amrun SN, Bhanu Prakash KN, Cozzone PJ, Renia L, Lee PTH, Ng LFP. Multimodal assessments of Zika virus immune pathophysiological responses in marmosets . Scientific Reports. Nov 2018(1):17125. doi: 10.1038/s41598-018-35481-6
9.	Bhanu Prakash KN, Srour H, Velan SS, Chuang KH. A method for automatic segmentation of Brown Adipose Tissue . Magnetic Resonance Materials in Physics, Biology and Medicine. Apr; 29(2):287-99, 2016. DOI 10.1007/s10334-015-0517-0
10.	Bhanu Prakash KN, Verma SK, Yaligar J, Goggi J, Gopalan V, Lee SS, Tian X, Sugii S, Leow MK, Bhakoo K, Velan SS. Segmentation and characterization of Interscapular Brown Adipose Tissue in rats by Multi-Parametric Magnetic Resonance Imaging . Magnetic Resonance Materials in Physics, Biology and Medicine. Apr; 29(2):277-86, 2016. DOI 10.1007/s10334-015-0514-3.
11.	Chaurasia B, Kaddai VA, Lancaster GI, Henstridge DC, Sriram S, Galam DL, Gopalan V, Bhanu Prakash KN, Velan SS, Bulchand S, Tsong TJ, Wang M, Siddique MM, Yuguang G, Sigmundsson K, Mellet NA, Weir JM, Meikle PJ, Bin M Yassin MS, Shabbir A, Shayman JA, Hirabayashi Y, Shiow ST, Sugii S, Summers SA. Adipocyte Ceramides Regulate Subcutaneous Adipose Browning, Inflammation, and Metabolism . Cell Metabolism. 2016 Oct 21. pii: S1550-4131(16)30533-2. doi: 10.1016/j.cmet.2016.10.002.

Patent granted/filed

1	Bhanu Prakash KN , Arvind CS, Robin Vinod Vargehese. Deep Learning based segmentation of Stroke regions in Computer Tomography Scans. SBIC/Z/11595. TD Filed on 10th March 2020.
2	Bhanu Prakash KN , Krishna Kath Chitta, Bui Thuy Tien. Method and System of Segmenting Image of Abdomen of Human into Image segments corresponding to Fat compartments. PCT/SG2019/050160 has been filed on 26 March 2019.
3	Ananthasubramaniam A, Bhanu Prakash KN , Thirunavuukarasuu A, YANG Guoliang. Mobile based framework for clinical emergencies. BIL/Z/05776, BIL/P/05776/02/SG; SG patent application no. filed 201001347-2 filed on 25 Feb. 2011, Singapore Patent Number: 183115, Grant Date: 13 Sep 2013.
4	Gupta V, Bhanu Prakash KN , Nowinski L. Method for identifying a pathological region of a scan such as an ischemic stroke region of an MRI scan. ETPL Ref: BIL/P/04489/02/EP. European Patent Number: 2089851, Filing Date: 05 Dec 2007, Grant Date: 10 Jul 2013.
5	Gupta V, Bhanu Prakash KN , Nowinski L. Discriminating infarcts from artifacts in MRI scan data. BIL/P/04941/05/SG, SG Patent Application No. 201004915-3; Based on International Application No. PCT/SG2009/000009, SG Patent Number 163063, Filing Date: 06 Jan 2009, Grant Date: 28 Feb 2013.
6	Gupta V, Bhanu Prakash KN , Nowinski WL. Method for identifying a pathological region of a scan, such as an ischemic stroke region of an MRI scan. BIL/P/04489/04/US, US Patent Application No. 12/518119, US Patent No. 8369598, Filing Date 5 Dec 2007, Grant Date 5 Feb 2013.
7	Ihar Volkau, Bhanu Prakash KN , Ng Ting Ting, Varsha Gupta. Registering Brain Images by Aligning Reference Ellipses. BIL/P/04287/04/US, US Patent No. 8311359, Granted 13 November 2012, Filing Date 28 June 2007.
8	Bhanu Prakash KN , Gupta V, and Nowinski WL: Segmenting infarct in diffusion weighted imaging volumes. BIL/P/04381/03/US, US Patent No. 8125223, Granted 28 February 2012, Based on United States of America Patent Application No. 12/311484.
9	Varsha Gupta, K.N, Bhanu Prakash , Wieslaw Nowinski. Method for identifying a pathological region of a scan, such as an ischemic stroke region of an MRI scan. ETPL Ref: BIL/P/04489/03/SG, Singapore Patent Application No. 2009019720, Grant Number – 151426, Granted on – 31 Dec 2011.
10	Ihar Volkau, K.N, Bhanu Prakash , Ng Ting Ting, Varsha Gupta, Wieslaw Nowinski. Localization of Brain Landmarks such as the Anterior and posterior commissures based on geometrical fitting. ETPL Ref: BIL/P/04234/03/SG, Singapore Patent No. 150019 [WO 2008/024082], Grant Number – 150019, Grant Date – 31 Aug 2011.
11	Bhanu Prakash KN , Gupta V, and Nowinski WL. Segmenting infarct in diffusion weighted imaging volumes. BIL/Z/04381, BIL/P/04381/00/PCT, PCT/SG2006/000292, SG Patent Application No: 200900507-5 filed 3 Oct. 2006. SG patent no. 149541 granted on 31 Dec 2009. www.freepatentsonline.com/EP2074584.html (former title: Segmentation and identification of infarcts and artifacts in diffusion weighted volumes using energy measures).
12	Bhanu Prakash KN , Nowinski WL. Automatic detection of anterior and posterior commissure landmarks. BIL/P//1390/SG; SG Patent Application No: 200808110-1, Priority date: 19 Nov 2003, Singapore patent No.: 147488, Filing date: 1 Nov 2004, Grant date: 29 October 2010.
13	Bhanu Prakash KN , Nowinski WL. Automatic detection of anterior and posterior commissure

	landmarks. BIL/P//1390/SG; SG 200306861-6, filed 19 Nov. 2003. WO 2005/048844 A1, 2 Jun. 2005. BIL/P/1390/3195/EP, 04775677.0 (EP) filed on 12 Jun 2006. SG 1691687 published 23 Aug. 2006. US patent publication no:US2007/0076927A1 on 5 April 2007. US Patent no. US7,783,090 granted on 24 Aug.2010 (former invention title: Automatic detection of anterior and posterior commissures in MR volume data).
14	Ihar Volkau, Bhanu Prakash KN , Ng Ting Ting, Varsha Gupta, Wieslaw Nowinski. Localization of Brain Landmarks such as the Anterior and posterior commissures based on geometrical fitting. Grant Number – US8,045,775, Grant Date –25 Oct 2011.
15	Nowinski WL, Bhanu Prakash KN , Volkau I, Ananthasubramaniam A. Method and apparatus for atlas-assisted interpretation of magnetic resonance diffusion and perfusion images. BIL/P//2575/US, BIL/P/2575/2591/US US60/676,888 provisional application filed on 2 May 2005. PCT/SG2006/000113 and US11/415,679, 2 May 2006. SG patent no. 137145 granted on 14 May 2010. US Patent no. US7,783,132 granted on 24 Aug 2010 www.freepatentsonline.com/y2007/0014453.html
16	Nowinski Wieslaw, Bhanu Prakash K.N. , Ihar Volkau, Anand Ananthasubramaniam. Method and apparatus for atlas assisted interpretation of magnetic resonance diffusion and perfusion images. PCT Patent Application No: PCT/SG2006/000113, Filing date: 02 May 2006, Singapore Patent No.: 137145, Grant date: 14 May 2010
17	Bhanu Prakash KN , Volkov I, Nowinski WL. Locating a mid-sagittal plane, BIL/P//1666/US filed on 2 Apr. 2004.BIL/P/1666/2475/PCT. PCT/SG2005/000106 application filed on 1 Apr. 2005. WO 2005/096227 A1 published on 13 Oct. 2005. SG200604563-7 filed on 6 Jun 2006. EP 05722353.9 filed on 1 Apr. 2005. SG patent grant no. 200604563-7, granted on 30 Nov. 2007. www.freepatentsonline.com/y2007/0276219.html