

## Dr. Preethika Immaculate Britto

Assistant Professor

### Personal Data:

Nationality | India  
Date of Hire | 2018  
Date Rank Obtained | 2018  
Department | Biomedical Engineering  
Email | [pbritto@kfu.ed.sa](mailto:pbritto@kfu.ed.sa)  
Office No | 59-3084  
Office Phone No | 0135897742

### Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Biomedical Engineering	Rehabilitation robotics	VIT University, Vellore	India	2017
Masters (M.Tech)	Biomedical Engineering	Rehabilitation Engineering	VIT University, Vellore	India	2010
Bachelor (B.Tech)	Biomedical Engineering	Biomedical Instrumentation	Anna University	India	2007

### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Design and development of rehabilitative exoskeletons in Mobility assistance for Paraplegics (REMAP)
Master	Wheel chair automation using eyeball and shoulder kinematics

### Experiences:

Title of Job	Address of Work	Country	Date	
Assistant professor	College of Engineering King Faisal University	Kingdom of Saudi Arabia	From	2018
			To	Current
Assistant professor	School of Biosciences and technology, VIT University	Vellore, India	From	2010
			To	2015
Biomedical Engineer	Cardiocare Technologies	Chennai, India	From	2008
			To	2007

### Research Interests:

- 1- Robotics
- 2- Exoskeletons
- 3- Prosthetics & Orthotics
- 4- Gait measurement
- 5- Biomechanics
- 6- Medical Mechatronics
- 7- Embedded Systems
- 8- Rehabilitation Engineering
- 9- Biomedical Instrumentation

### Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	Sakthivel Sankaran, Pallikonda Rajasekaran Murugan, Preethika Immaculate Britto et al	A guidance system to read and analyze the traffic rules for the visually impaired human	Electronic Devices, Circuits, and Systems for Biomedical Applications Pages 365-377 Academic Press Publication date 2021/1/1	<a href="https://www.elsevier.com/books/electronic-devices-circuits-and-systems-for-biomedical-applications/tripathi/978-0-323-85172-5">https://www.elsevier.com/books/electronic-devices-circuits-and-systems-for-biomedical-applications/tripathi/978-0-323-85172-5</a>
2	Sakthivel Sankaran, Vijayalakshmi Murugan, Kavivarsha Alaguramesh, Preethika Immaculate Britto, et al	Design of IoT based Health Care Monitoring Systems using Raspberry Pi: A Review of the Latest Technologies and Limitations	Publication date 2020/7/28 2020 International Conference on Communication and Signal Processing (ICCSP) Pages 0028-0032 Publisher IEEE	<a href="https://ieeexplore.ieee.org/abstract/document/9182325">https://ieeexplore.ieee.org/abstract/document/9182325</a>
3	Sakthivel Sankaran, , Preethika Immaculate Britto, et al	A Literature Review: To predict the Problem of Post Analysis in Breast Cancer Determination using the Wearable Device	Publication date 2020/7/28 Conference 2020 International Conference on Communication and Signal Processing (ICCSP) Pages 0574-0581 Publisher IEEE	<a href="https://ieeexplore.ieee.org/abstract/document/9182048">https://ieeexplore.ieee.org/abstract/document/9182048</a>
4	Sakthivel Sankaran, Preethika Immaculate Britto, Sankaran Esakky et al	Recuperation from Hamstring muscle injury using a novel-indigenously developed highly compatible prototype	Publication date 2021/7/8 Conference 2021 6th International Conference on Communication and Electronics Systems (ICCES) Pages 1-7 Publisher IEEE	<a href="https://ieeexplore.ieee.org/abstract/document/9489155">https://ieeexplore.ieee.org/abstract/document/9489155</a>

5	Bonny Bernard, Preethika Immaculate Britto	Design Analysis and Manufacturing of Device for Rehabilitation of Hand Fingers Based on Illusionary Movements by Tendon Vibrations	Publication date 2016 Book CAD/CAM, Robotics and Factories of the Future Pages 217-228 Publisher Springer, New Delhi	<a href="https://link.springer.com/chapter/10.1007/978-81-322-2740-3_22">https://link.springer.com/chapter/10.1007/978-81-322-2740-3_22</a>
6	Preethika Britto, Suganthan Veerachamy, Jayasubha Ravi Yathav, Habeebunnisha Kaleelur Rahman	Automated Infusion Control with Core Body Temperature for Infants Under IV Administration	Publication date 2015 Book 7th WACBE World Congress on Bioengineering 2015 Pages 118-121 Publisher Springer, Cham	<a href="https://link.springer.com/chapter/10.1007/978-3-319-19452-3_32">https://link.springer.com/chapter/10.1007/978-3-319-19452-3_32</a>
7	Akriti Chadda, Manish Thigale, Preethika Britto	Medical Device to Tackle Neurogenic Bladder	Publication date 2015 Book 7th WACBE World Congress on Bioengineering 2015 Pages 178-181 Publisher Springer, Cham	<a href="https://link.springer.com/chapter/10.1007/978-3-319-19452-3_47">https://link.springer.com/chapter/10.1007/978-3-319-19452-3_47</a>
8	Preethika Britto, V Rekha, Sudesh Sivasaru	Conceptual design of a paraplegic walker	Publication date 2012/1/1 Pages 04-04 Publisher IET Digital Library	<a href="https://digital-library.theiet.org/content/conferences/10.1049/cp.2012.1490">https://digital-library.theiet.org/content/conferences/10.1049/cp.2012.1490</a>
9	Preethika Britto, Rekha Vijayakumar, Sudesh Sivasaru	Design Evaluation of REMAP Exoskeleton	Publication date 2015 Book 7th WACBE World Congress on Bioengineering 2015 Pages 110-113 Publisher Springer, Cham	<a href="https://link.springer.com/chapter/10.1007/978-3-319-19452-3_30">https://link.springer.com/chapter/10.1007/978-3-319-19452-3_30</a>
10	Preethika Britto, Sudesh Sivasaru	Assistive Robotics for Hemiplegics: Smart Wheel Chairs in Rehabilitative Robotics	Publication date 2014/10/1 Journal BIOMEDICAL ENGINEERING-BIOMEDIZINISCHE TECHNIK Volume 59 Pages S1008-+ Publisher WALTER DE GRUYTER GMBH	<a href="https://scholar.google.com.my/citations?view_op=view_citation&amp;hl=en&amp;user=0NNEWOMAAAAJ&amp;citation_for_view=0NNEWOMAAAAJ:9yKSN-GCB0IC">https://scholar.google.com.my/citations?view_op=view_citation&amp;hl=en&amp;user=0NNEWOMAAAAJ&amp;citation_for_view=0NNEWOMAAAAJ:9yKSN-GCB0IC</a>



11	Preethika Immaculate Britto, Rekha Viajakumar, Sudesh Sivarasu	Adaptive Control of Biomechanically Inspired Orthotic Exoskeleton in Paraplegic Rehabilitation	Publication date 2014/10/1 Journal BIOMEDICAL ENGINEERING- BIOMEDIZINISCHE TECHNIK Volume 59 Pages S1005-S1007 Publisher WALTER DE GRUYTER GMBH	<a href="https://scholar.google.com.my/scholar?hl=en&amp;as_sdt=0,5&amp;cluster=4305457616253194909">https://scholar.google.com.my/scholar?hl=en&amp;as_sdt=0,5&amp;cluster=4305457616253194909</a>
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**Language Proficiency:**

1. English-Fluent
2. Tamil-Native