Utilization of 3D Printer into Development ofAffordable andFunctional Artificial Limb

MohammadNasfikurRahmanKhan

DepartmentofElectricalandElectronicEngineering,IndependentUniversity, Bangladesh

Abstract:

Three-dimensional(3D)printinghasbecome one of mostinfluential concept in recent years asit refers to thetechnology which converts avirtualmodel toatangibleobject. The advancement in3Dprinting technologies on medical sector is illustrated into building affordable and functional artificial limbs. However, in Bangladesh use of three-dimensional printer is very limited and used only in research purposes. This paper titled 'Utilization of 3D Printer into Development of Affordable and Functional Artificial Limb' aimsto examine the present situation of people with disabilities with prosthetic based treatment and the opportunities for contemporary technology to suppress these problems. The conventional process of producing artificial limbs or prosthesis, especially the lower limns are most expensive and the treatment procedure is time consuming. Besides traditional replacement system for the upper limbs is not available till date. On the contrary, three-dimensional printers can help to manufacture these artificial limbs at an reasonable price. These limbs will come with more accuracy, durability and flexibility, whichwillhelpmanydisablepeopletoleadabetterlife.

Biography:

Mohammad Nasfikur Rahman Khan completed his M.Sc. in Biomedical Engineering from Newcastle University, United Kingdom and B.Eng in Electrical and Electronic Engineering from Sheffield Hallam University, United Kingdom. He is currently working as a lecture of Independent Universi-ty and research associate of AIMS lab United International University, Bangladesh. He is currently involved in several projects on 3D printing based artificial limbs development.

Publication of speakers:

1. MohammadNasfikurRahmanKhan et al; Customized Hybrid Bluegrass Appliance: An Innovative Technique, 2018 April; 11

2. MohammadNasfikurRahmanKhan et al;Validity and Reliability of the Hausa Version of Multidimensional Scale of Perceived Social Support Index, 2015 Feb 21

3. MohammadNasfikurRahmanKhan et al; ArASL: Arabic Alphabets Sign Language Dataset, 2019 Feb 23.

4. MohammadNasfikurRahmanKhan et al; Selecting efficacious Bcl-2 family inhibitors for optimal clinical outcome, 2015 Nov; 3.

5. MohammadNasfikurRahmanKhan et al; MI-219-Zinc Combination: a new Paradigm in MDM2 Inhibitor Based Therapy, 2011 Jan 6.

Citation: Mohammad Nasfikur Rahman Khan; Utilization of 3D Printer into Development of Affordable and Functional Artificial Limb ; 3D Printing 2020; May 22-23, 2020; Paris, France