Nabeel Chowdhury, Neuroengineering PhD Student

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Objective

Utilize neural interfaces to explore how the mind understands our senses at a basic level and leverage this understanding to integrate sensation with the control of technology/

Education

PhD (ongoing) | AUG, 2017- | CASE WESTERN RESERVE UNIVERSITY

· Major: Biomedical Engineering

· GPA=4.0

BS | AUG, 2012-MAY, 2016 | WASHINGTON UNIVERSITY IN ST. LOUIS

· Major: Biomedical Engineering

· GPA=3.5

Experience

RESEARCH ASSISTANT (WOC APPOINTMENT) | LEWIS STOKES VA | AUGUST 2017-

· Research assistant with a WOC appointment at the Lewis Stokes Veterans Association in Cleveland working on peripheral nerve interfaces to restore and study sensation in amputees.

RESEARCHER | REHABILITATION INSTITUTE OF CHICAGO | JULY 2016-JULY 2017

· Research assistant at the Rehabilitation Institute of Chicago in the Center for Bionic Medicine. Did work on the design and control of lower limb powered prosthetic devices. Worked on teams of engineers as well as had independent projects towards the goal of improving these devices.

RESEARCHER | WASHINGTON UNIVERSITY SCHOOL OF MEDICINE | FEBRUARY 2015-MAY 2016

· Research as part of the WUIMIS biomaterials lab designing medical models, creating 3D printed myoelectric prosthetics   and 3D printed body powered prosthetics, 3D printing medical models out of various materials, and bioprinting various   structures. I also taught 3D modeling and prosthetic design to the younger undergrads in the lab to carry on after I   graduated.

RESEARCHER | WASHINGTON UNIVERSITY SCHOOL OF MEDICINE | MAY 2015-AUGUST 2015

· Created an affordable, 3D printed, myoelectric prosthetic for a pediatric patient.

RESEARCH ASSISTANT | WASHINGTON UNIVERSITY SCHOOL OF MEDICINE | AUGUST 2012-FEBRUARY 2015

· Research in a biomaterials lab under Dr. Corey Deeken at the Washington University School of Medicine in the   effectiveness of absorbable electrospun hernia repair meshes and their comparison to market brand Hernia meshes.   Tissue Culture of mouse fibroblasts. Scanning Electron Microscopy. Histology. Biomechanical testing experience on an   Instron. Experience in pig studies with hernia meshes.

Skills & Abilities

Programming in Java, Matlab, Python, TensorFlow, R, C++
Machine learning
Experimental design
Code repository management with git and GitHub
Statistical analysis
Usage of peripheral neural interfaces in stimulation and recording
Research subject managment
3D modeling in CAD, Blender, Inventor, and Zbrush Medical Modeling

Honors and Awards

2018,21	NIH T32 Grants (5T32EB004314-20, 2T32EB004314-21)
2014-16	Dean's List

References

Dr. Dustin Tyler	dustin.tyler@case.edu	Dr. Hillel Chiel	hillel.chiel@case.edu
Dr. Emily Graczyk	emily.graczyk@case.edu	Dr. Levi Hargrove	l-hargrove@northwestern.edu