Sloke Shrestha - CV

Email: <u>sshrestha7@patriots.uttyler.edu</u> GitHub: <u>https://github.com/slokeshrestha26</u> Webpage: <u>slokeshrestha26.github.io</u>

EDUCATION

Bachelor of Science in Electrical Engineering (B.S.E.E). Minor in Mathematics 2018 – 2022 (anticipated)

The University of Texas at Tyler Major GPA: 4.0/4.0 Cumulative GPA: 3.96/4.0

RESEARCH INTERESTS

Human Computer Interaction, Health Monitoring, Ubiquitous Computing

PUBLICATIONS

- [1] Carreiro S, Taylor M, **Shrestha S**, Reinhardt M, Gilbertson N, Indic P. Realize, Analyze, Engage (RAE): A digital tool to support recovery from substance use disorder. *J Psychiatry Brain Sci.* 2021
- [2] Carreiro S, Chintha KK, **Shrestha S**, Chapman B, Smelson D, Indic P. Wearable sensor-based detection of stress and craving in patients during treatment for substance use disorder: A mixed methods pilot study. *Drug and Alcohol Dependence*. 2020, 107929

IN PREPARATION

- [3] **Shrestha S**, Taylor M, Leach R, Carreiro S, Indic P. Detection of craving and stress in patients with substance use disorder using wearable sensor data using Machine Learning
- [4] VNSA Amperayani, **Shrestha S**, Colm T, Ambalavanan N, Indic P. Machine Learning Algorithms for the Prediction of Bradycardia Risk in Preterm Infants

RESEARCH EXPERIENCE

Visiting Student

Summer 2021 - Present

EECS, CSAIL, Massachusetts Institute of Technology

Advisor: Professor Stefanie Mueller

- Performing benchmark tests for image reconstruction algorithms.
- Adding more features for Electrical Impedance Tomography (EIT) mobile visualization API.
- Exploring and using image reconstruction API.

Undergraduate Research Assistant

Summer 2019 - Present

Department of Electrical Engineering, The University of Texas at Tyler Advisor: Professor Premananda Indic

- Developing Machine learning Algorithms. Increased accuracy by 20 percent [1,2].
- Developing feature extraction pipeline for Machine Learning.
- Collaborating and coordinating with MDs, PhDs, and industry professionals.
- Reviewing data fidelity from smartphone app and wearable sensor data used in clinical trials.

TEACHING EXPERIENCE

Laboratory Assistant, Linear Circuits

Spring 2021

Department of Electrical Engineering, The University of Texas at Tyler Supervisor: Professor Premananda Indic

• Presented hands on circuit implementation to a class of about 10.

PASS Tutor Spring 2019

Academic Success, The University of Texas at Tyler

 Tutored about 15 students every week for Chemistry, Physics, and Calculus.

AWARDS AND HONORS

Autodesk Tapia Scholarship, Richard Tapia '20 Conference	2020
President's Honor Roll, The University of Texas at Tyler	2019 - Present
Dean's List, The University of Texas at Tyler	2018
Presidential Fellow Scholarship, The University of Texas at Tyler	2018 - 2022
(Full tuition, fees, books, room and board covered)	

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Vice President, UT Tyler IEEE Corona Chapter	2021 - Present
Junior Representative, UT Tyler IEEE Corona Chapter	2020 - 2021
IEEE (Student Member)	2019 - Present

LANGUAGES

English: Proficient Nepali: Proficient Hindi: Fluent

LAST MODIFIED: October 13, 2021