# Sloke Shrestha - CV

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#### **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.
- Developing data parsing API for annotated time series data.
- 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 26, 2021