

Sloke Shrestha

Department of Electrical and Computer Engineering
Crockell School of Engineering
The University of Texas at Austin
Austin, TX 78712

Email : sloke@utexas.edu
Mobile : +1 (929) 385-1373
Website: <https://slokeshrestha26.github.io>
GitHub: <https://github.com/slokeshrestha26>

EDUCATION

- **University of Texas at Austin** Austin, TX
MS/PhD in Electrical and Computer Engineering / Advisor: Dr. Edison Thomaz *Aug. 2022 – May 2027*
Affiliated to Wireless Networking and Communications Group (WNCG)
- **The University of Texas at Tyler** Tyler, TX
Bachelor of Science in Electrical Engineering; GPA: 3.9/4.0 *Aug. 2018 – May 2022*
Research Interests: Human Centered Computing, Ubiquitous Computing, Health Monitoring

EXPERIENCE

- **The University of Texas at Austin, Graduate Research Assistant** Austin, TX
Human Signals Lab *Aug 2022 - Present*
 - Built Mobile applications in iOS using Swift and Xcode platform to run experiments related to concerning smartphone user interaction inference using passive sensing
 - Collaborated with two undergraduate research assistants to review papers and design experiments
- **The University of Texas at Tyler, Undergraduate Research Assistant** Tyler, TX
Predictive Analytics Lab *May 2019 - May 2022*
 - Developed machine learning training pipeline using Python. The pipeline automated data preprocessing which quadrupled work productivity
 - Led weekly machine learning workshops where I helped five students and researchers understand machine learning literature better
 - Collaborated with MDs, Ph.Ds, engineers, and business executives to bring an experimental wearable health framework, RAE Health, to the market
- **Massachusetts Institute of Technology (MIT), Visiting Research Assistant** Cambridge, MA
Computer Science & Artificial Intelligence Laboratory *Mar. 2021 - Dec. 2021*
 - Benchmarked an image reconstruction algorithm and quantified the image fidelity of a Tomography visualization app, in a toolkit called EIT-kit, using Swift and Python
 - Implemented a partial differential equation solver in Swift which was used in the visualization app

TEACHING

- **Laboratory Assistant, The University of Texas at Tyler** Tyler, TX
Supervisor: Premananda Indic / EENG 3104: Linear Circuits I *Jan. 2021 - May 2021*

PROJECT

- **Wearable Sensor Framework | C, C++** *Jan 2021 - May 2022*
Senior Capstone Project
 - Programmed two microcontrollers, Teensy 4.1 and Atmel SAMD21 using C/C++ to acquire physiological data from a human wrist
 - Trained four colleagues in github which enabled a good version control of the project
- **Echolocation Robot | C** *Jan 2021 - May 2022*
Senior Capstone Project
 - Built an autonomous robot that leverages high frequency sound waves echolocation to avoid obstacles. Programmed Arduino Uno with C.

SKILLS

Languages: Python, MATLAB, C, Swift, Java

Frameworks: Scikit-Learn, Pandas, Numpy, Xcode

Tools: GitHub, Shell(Bash, Zsh), Linux

AWARDS AND HONORS

- UT Austin Engineering Fellowship, University of Texas at Austin 2022
- Presidential Fellow Scholarship, The University of Texas at Tyler 2018 - 2020
- Tapia Scholarship, Richard Tapia '21 Conference 2022
- Autodesk Tapia Scholarship, Richard Tapia '20 Conference 2020
- President's Honor Roll, The University of Texas at Tyler 2019 - 2020
- Dean's List, The University of Texas at Tyler 2018

PUBLICATIONS

1. Stephanie Carreiro, Melissa Taylor, **Sloke Shrestha**, Megan Reinhardt, Nicole Gilbertson, and Premananda Indic. Realize, analyze, engage (rae): **A digital tool to support recovery from substance use disorder**. *Journal of psychiatry and brain science*, volume 6. NIH Public Access, 2021
2. Stephanie Carreiro, Keerthi Kumar Chintha, **Sloke Shrestha**, Brittany Chapman, David Smelson, and Premananda Indic. **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*, volume 209, page 107929. Elsevier, 2020.
3. **Sloke Shrestha**, Joshua Stapp, Melissa Taylor, Rebecca Leach, Stephanie Carreiro, Premananda Indic. **Towards device agnostic detection of stress and craving in patients with substance use disorder**. (*Hawaii International Conference on System Sciences, 2023*)

Last Modified: Dec 26, 2022