

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

## EDUCATION

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- **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

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- **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

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

## SKILLS

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**Languages:** Python, MATLAB, C, Swift, Java

**Frameworks:** Scikit-Learn, Pandas, Numpy, Xcode, Tensorflow, Keras, PyTorch

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

## AWARDS AND HONORS

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- 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

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1. **Sloke Shrestha**, Joshua Stapp, Melissa Taylor, Rebecca Leach, Stephanie Carreiro, Premananda Indic. (2023) **Towards device agnostic detection of stress and craving in patients with substance use disorder.** *Proceedings of the 56th Annual Hawaii International Conference on System Sciences.* (p. 3156-3163)
2. 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
3. Stephanie Carreiro, Keerthi Kumar Chintla, **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.

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