## Megha Parhi

Email: mparhi@utexas.edu Phone: 612-707-3338

EDUCATION University of Texas, Austin, TX

M.S. Electrical Engineering Advisor: Robert W. Heath Jr August 2016 – Present

University of Minnesota, Minneapolis, MN

September 2010 - May 2015

Bachelor of Electrical Engineering

COMPUTER SKILLS MATLAB, C/C++, R, Python 2/3, IATEX, Microsoft Office

TEACHING Graduate Teaching Assistant

Spring 2017

University of Texas – Department of Electrical & Computer Engineering

TA for EE 313, Linear Systems and Signals: held weekly office hours, graded homework and exams, taught lecture when professor is absent, and wrote solutions to homework and made exam problem.

Work Experience Minnetronix Inc., St. Paul, MN

August 2015 – June 2016

QA Test Engineer

- $\cdot$  Assisted with the development and verification testing on a Level 3 medical device for a Ventricular Assistant Device controller.
- Assisted with the development and verification for an Enterprise Resource Planning system for the company.
- · Developed and tested a protocol to test viscosity of blood using a VAD.

RESEARCH

## **Applied Research Labs**

January 2018 – Present

Advisor: Robert W. Heath Jr. University of Texas – ARL Compressed Sensing for sonar arrays

## Wireless and System Innovations Lab (WSIL)

June 2017– Present

Advisor: Robert W. HEATH Jr.

University of Texas – Department of Electrical & Computer Engineering

Developed and collected data for the analysis of the position of a vehicle based on camera and DSRC for beam training by implementing Computer Vision Algorithms.

**Riedel Lab** July 2014 – May 2015

Advisor: Marc D. Riedel

University of Minnesota – Department of Electrical & Computer Engineering

Worked on the synthesis of Stochastic Computing systems using correlated bit-streams for my senior honors project and the analysis of Stochastic Computing using correlated bit-streams. Synthesis was done using MATLAB programming.

Parhi Lab May 2013 – July 2014

Advisor: Keshab K. Parhi

University of Minnesota – Department of Electrical & Computer Engineering Worked on a project for seizure prediction using MATLAB and Machine Learning to propose an algorithm to predict seizures. Worked on a simplified approach to calculate Fast Fourier Transforms

(FFT) of real signals.

## **PUBLICATIONS**

- [1] Yin Liu, **Megha Parhi**, Marc D. Riedel, and Keshab K. Parhi. "Synthesis of correlated bit streams for stochastic computing". In: 50th Asilomar Conference on Signals, Systems and Computers, ACSSC 2016, Pacific Grove, CA, USA, November 6-9, 2016. IEEE, 2016, pp. 167–174.
- [2] **Megha Parhi**, Marc D. Riedel, and Keshab K. Parhi. "Effect of bit-level correlation in stochastic computing". In: 2015 IEEE International Conference on Digital Signal Processing, DSP 2015, Singapore, July 21-24, 2015. IEEE, 2015, pp. 463-467
- [3] Megha Parhi, Yingjie Lao, and Keshab K. Parhi. "Canonic real-valued FFT structures". In: 48th Asilomar Conference on Signals, Systems and Computers, ACSSC 2014, Pacific Grove, CA, USA, November 2-5, 2014. IEEE, 2014, pp. 1261–1265.

Honors and Awards Undergraduate Research Opportunities Program (UROP) Award Carl E. and Ethel A. Swanson Scholarship

Spring 2015 2014 - 2015

Professional Organizations

IEEE Student Member Eta Kappa Nu (HKN) September 2013 – Present May 2013 – Present