# **Tasmeen Zaman Ornee**

Email: tzo0017@auburn.edu Website: https://github.com/tasmeen Linkedin: www.linkedin.com/in/tasmeen

Mobile: 334 332 3690

EDUCATION Ph.D. Candidate in Electrical Engineering

Aug. 2018-Present

Auburn University, AL Advisor: Yin Sun

M.Sc. in Electrical Engineering, CGPA: 4.00

Aug. 2022

Auburn University, AL

B.Sc. in Electrical and Electronic Engineering, CGPA: 3.73

Sep. 2017

Rank: 34/214

Bangladesh University of Engineering and Technology (BUET), Bangladesh

RESEARCH

Communication Networks

**INTERESTS** 

Information Theory
Age of Information
Reinforcement Learning
Remote Estimation

# PUBLICATIONS Book Chapter:

• Tasmeen Zaman Ornee and Yin Sun, "Age of Information and Remote Estimation" in *Age of Information: Foundations and Applications*. Bo Zhou, Walid Saad, Harpreet S. Dhillon, Nikolas Pappas, and Mohamed Abd-Elmagid eds. *Cambridge University Press* (*CUP*), 2023.

#### Journal:

• Tasmeen Zaman Ornee and Yin Sun, "Sampling and Remote Estimation for the Ornstein-Uhlenbeck Process through Queues: Age of Information and Beyond", *IEEE/ACM Transaction on Networking*, 2021. (Recommended for Fast-tracked Review)

## **Conference publications:**

- Tasmeen Zaman Ornee, Md Kamran Chowdhury Shisher, Clement Kam, and Yin Sun, "Context-Aware Status Updating: Wireless Scheduling for Maximizing Situational Awareness in Safety-Critical Systems", accepted by *IEEE MILCOM QuAVoI Workshop*, 2023.
- **Tasmeen Zaman Ornee** and Yin Sun, "A Whittle Index Policy for the Remote Estimation of Multiple Continuous Gauss-Markov Processes over Parallel Channels", accepted by *ACM MobiHoc*, 2023.

- **Tasmeen Zaman Ornee** and Yin Sun, "Performance Bounds for Sampling and Remote Estimation of Gauss-Markov Processes over a Noisy Channel with Random Delay", *IEEE SPAWC*, 2021. (**Invited Paper**)
- **Tasmeen Zaman Ornee** and Yin Sun, "Sampling for Remote Estimation through Queues: Age of Information and Beyond", *IEEE WiOpt*, 2019. (**Best Paper Award**)
- Md. Kamran Chowdhury Shisher, Tasmeen Zaman Ornee, and Md. Farhad Hossain, "QoS aware user association in massive MIMO enabled hetnets for DTU and NDTU traffic", *IEEE ICAEE*, 2017.

# PREPRINTS & IN PROGRESS

- Tasmeen Zaman Ornee, Md Kamran Chowdhury Shisher, Clement Kam, and Yin Sun, "Context-Aware Status Updating in Safety-Critical Systems", in preparation, 2023.
- **Tasmeen Zaman Ornee** and Yin Sun, "Remote Estimation of Gauss-Markov Processes over Multiple Channels: A Whittle Index Policy", submitted to *IEEE/ACM Transactions on Networking*, 2022.
- Md Kamran Chowdhury Shisher, **Tasmeen Zaman Ornee**, and Yin Sun, "A Local Geometric Interpretation of Feature Extraction in Deep Feedforward Neural Networks", 2022.

### TEACHING 1. **Teaching Assistance:**

#### **Courses**

• ELEC-2120: Signals and Systems, Auburn University	Spring 2023
• ELEC-2120: Signals and Systems, Auburn University	Fall 2022
• ELEC-3810: Fundamentals of Electrical Engineering, Auburn University	Spring 2022
• ELEC-2120: Signals and Systems, Auburn University	Fall 2022
• ELEC-2120: Signals and Systems, Auburn University	Fall 2021

# **Roles**

# **ELEC-2120: Signals and Systems:**

Conducted lab lectures on linear Systems, convolution, Fourier series, Fourier transformation, and Laplace transformation both with TIMS module and MATLAB. Graded the homeworks, quizzes, and labs for approximately 55 students.

### **ELEC-3810: Fundamentals of Electrical Engineering:**

Graded the homeworks, quizzes, and exams for approximately 60 students.

#### **TALKS**

- 1. A Whittle Index Policy for the Remote Estimation of Gauss-Markov Processes over Multiple Channels, **NASIT**, Poster Presentation, Philadelphia, PA, 23 June 2023.
- 1. A Whittle Index Policy for the Remote Estimation of Gauss-Markov Processes over Multiple Channels, **ITA**, Poster Presentation, San Diego, CA, 17 Feb. 2023.
- 2. Optimizing age of information with correlated sources **ACM MobiHoc**, on behalf of Vishrant Tripathi and Eytan Modiano, Seoul, South Korea, 18 Oct. 2022.
- 3. Sampling of Gauss-Markov Processes for Remote Estimation **Ph.D. General Examination**, Auburn University, Auburn, AL, 04 Oct. 2022.
- 4. Sampling of Gauss-Markov Processes over a Channel with Random Delay, **Auburn Research Symposium**, Poster Presentation, Auburn University, AL, April 2022.
- 5. Performance Bounds for Sampling and Remote Estimation of Gauss-Markov Processes over Channel with Random Delay, **IEEE SPAWC**, Lucca, Italy, 2021. (virtual)
- 6. Sampling for Remote Estimation through Queues: Age of Information and Beyond, **Wireless Seminar**, Auburn University, Auburn, AL, Sep. 2019.
- 7. Sampling for Remote Estimation through Queues: Age of Information and Beyond, **IEEE/IFIP WiOpt**, Avignon, France, June 2019.

# PROFESSIONAL MEMBERSHIP

- IEEE Graduate Student Member
- IEEE Information Theory Society Member
- IEEE Communication Society Member
- ACM SIGMOBILE Member

North American School of Information Theory NSF Travel Grant	2023
100+ Women Strong Outstanding Graduate Student Award 2023	2023
100+ Women Strong Travel Fellowship Award	2023
ACM SIGMOBILE Student Travel Grant	2022
100+ Women Strong Travel Fellowship Award	2022
IEEE INFOCOM Student Conference Grant	2022
IEEE WiOpt Best Paper Award	2019
Dean's Award, BUET, Bangladesh	2017
Dean's Award, BUET, Bangladesh	2016
Dean's Award, BUET, Bangladesh	2015
HSC Scholarship (General), Government of Bangladesh	2012
Disciplined Student Award 2011-2012, Rajuk Uttara Model College	2012
Disciplined Student Award 2010-2011, Rajuk Uttara Model College	2011
SSC Scholarship (Talent), Government of Bangladesh	2010
Junior Scholarship (Talent), Government of Bangladesh, Position: 5th in Dhaka Board	2008
Primary Scholarship (Talent), Government of Bangladesh	2005
	100+ Women Strong Outstanding Graduate Student Award 2023 100+ Women Strong Travel Fellowship Award ACM SIGMOBILE Student Travel Grant 100+ Women Strong Travel Fellowship Award IEEE INFOCOM Student Conference Grant IEEE WiOpt Best Paper Award Dean's Award, BUET, Bangladesh Dean's Award, BUET, Bangladesh Dean's Award, BUET, Bangladesh HSC Scholarship (General), Government of Bangladesh Disciplined Student Award 2011-2012, Rajuk Uttara Model College Disciplined Student Award 2010-2011, Rajuk Uttara Model College SSC Scholarship (Talent), Government of Bangladesh Junior Scholarship (Talent), Government of Bangladesh, Position: 5th in Dhaka Board

#### **SERVICES**

### 1. Reviewer for Journal Manuscript Submissions:

Journal on Communications and Networks (JCN), 2023 IEEE Transactions on Networking (ToN), 2022, 2023 IEEE Transactions on Communications (TCOM), 2021, 2022, 2023 IEEE Transactions on Wireless Communications, 2020, 2022

IEEE Journal on Selected Areas in Communication AoI, 2020

# 3. Reviewer for Conference Manuscript Submissions:

IEEE INFOCOM, 2020, 2021, 2022, 2023

IEEE ITC, 2022

IEEE ISIT, 2022

IEEE INFOCOM AoI Workshop, 2019, 2020, 2022

IEEE SPAWC, 2021

IEEE WCNC, 2021

IEEE WCSP, 2019

4. Maintainer of an online paper repository on Age of Information, 2018-Present

See: http://webhome.auburn.edu/ yzs0078/AoI.html

5. Auxiliary Committee Member, Bangladesh Student Organization, Auburn University, 2021-2022.