

ESIC CURRENTS

February 21, 2025



ENERGY SYSTEMS INNOVATION CENTER

**An Energy Center Focused
On Education, Outreach,
and Research**

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**ESIC Research Excellence Partnership
Membership (REP)** – Enabling
excellence in **research**

**ESIC Power Education Partnership
Membership (PEP)** – Supporting
power education

UPCOMING EVENTS ...

AGI SEMINAR, WEDNESDAY, 2/26/25

Our next AGI Seminar will be **Wednesday, Feb. 26 10am-11am**, featuring WSU's own **Monowar Hasan**. Monowar will be presenting on **Confidential Deep Neural Inference for Real-Time Systems**. Please see the attached flier for additional information.

To join us virtually, please follow this [TEAMS](#) link. If you are on campus, please feel free to drop by EME 26 to join us in-person for the seminar.



Missed out on a seminar? All ESIC seminars are recorded and posted to our website, click [HERE](#) to go back and watch videos from earlier seminars.

STUDENT ENGAGEMENT ...

STUDENT SCHOLARSHIP NEWS

We at ESIC strive to guide our students through their academic career in the best possible way. We are happy to announce that our own Gerrit Bruland has received the IEEE PES Scholarship Plus Award. We are incredibly proud of Gerrit's accomplishment. An article in *WSU Insider* featuring both recipients, Gerrit Bruland, WSU Pullman, and Manuella Tossa, WSU Tri-Cities is being prepared. We will share the full story when it is published.



ESIC LINKEDIN REACHES MILESTONE ...



FOLLOW US ON LINKEDIN

ESIC is happy to announce that we have reached over **1,000 followers** on LinkedIn! To stay up-to-date on all things concerning ESIC and power engineering, follow us on our [LinkedIn](#) page where we post seminar updates, scholarships, job openings, and so much more!

“STUDENT SPOTLIGHT” SERIES FEATURE ON LINKEDIN

We invite you to view our Student Spotlight on [LinkedIn](#). Each week, Pearl Miglani, our intrepid communications coordinator, interviews ESIC students to provide a glimpse into their experiences, goals, and personal insights on the future of power engineering! We will begin to cover our terrific undergraduates who are pursuing careers in the power industry. Stay tuned as we begin this new series in the coming weeks.

GUIDING STUDENTS TO POWER ENGINEERING

As academics, fellow students, and industry stakeholders, you all have the potential to guide and mentor high school students and college undergraduates interested in working towards a power engineering degree. If you know of such a student, please encourage them to visit our [ESIC website](#) to find out more or ask them to contact us at esic.center@wsu.edu.

CONFIDENTIAL DEEP NEURAL INFERENCE FOR REAL-TIME SYSTEMS

~ by ~

MONOWAR HASAN
School of Electrical Engineering & Computer Science
Washington State University

Wednesday, February 26, 2025 • 10 AM - 11 AM • [Join the Meeting](#)

ABSTRACT

Deep neural networks (DNNs) are increasingly used in time-critical, learning-enabled cyber-physical applications such as autonomous driving and robotics. Many of them have stringent temporal (*i.e.*, "real-time") requirements. Despite the growing use of various deep learning models in real-time systems, protecting DNN inference from adversarial threats while preserving model privacy and confidentiality remains a key concern for resource and timing-constrained systems. Based on our recent exploration and findings in this domain, this talk will present challenges and new techniques to enable confidential deep neural for real-time systems.

BIO

Dr. Monowar Hasan is a Computer Science Assistant Professor at Washington State University (WSU). Before joining WSU, he held an Assistant Professor position at Wichita State University from 2021-2022. Dr. Hasan received his Ph.D. in Computer Science from the University of Illinois at Urbana-Champaign (UIUC) in 2020. His research interests include exploring security and resiliency techniques of cyber-physical system domains.

