ABUSAYEED SAIFULLAH

Associate Professor
Department of Computer Science
Wayne State University
Detroit, MI 48202

Phone: (313) 577-3186
Fax: (313) 577-6868
Email: saifullah@wayne.edu
`https://saifullah.eng.wayne.edu`

RESEARCH INTEREST

◇ Internet of Things

◇ Real-Time and Embedded Systems

◇ Wireless Networked Systems

◇ Cyber-Physical Systems

EDUCATION

◇ **PhD** 2008 - 2013
Department of Computer Science and Engineering
Washington University in St. Louis, Missouri, USA
Dissertation: *Real-time wireless sensor-actuator network for CPS.*
Advisor: **Chenyang Lu**, IEEE Fellow and ACM Fellow

AWARD & HONOR

◇ Faculty **Research Excellence Award** 2020 of the College of Engineering at Wayne State University.

◇ NSF **CAREER Award** 2019.

◇ NSF **CRII Award** (CISE Research Initiation Initiative Award) 2016.

◇ **The Best Paper Award** at **RTSS '14**.

◇ **The Best Student Paper Award** at **RTSS '11**.

◇ **Best Paper Award** candidate (one of the three best papers) at **SenSys '16** - *The 14th ACM Conference on Embedded Networked Sensor Systems*, the highest venue for sensor network system research.

◇ **Best Paper Award** candidate (one of the three best papers) at **RTAS '12** - *The 18th IEEE Real-Time and Embedded Tech. and Applications Symposium*, a flagship conference on real-time systems.

◇ **The Best Paper Award** at **ICII '18** - *The 1st IEEE Conference on Industrial Internet.*

◇ **Outstanding Paper Award** at **RTSS '19**.

◇ **Best Paper Award** candidate at **EWSN '21** - *The 18th International Conference on Embedded Wireless Systems and Networks.*

◇ **The Best Student Paper Award** at **ISPA '07** - *The 5th International Symposium on Parallel and Distributed Processing and Applications.*

◇ **The Best Paper Award** at *IoST-5G&B '23* – The 4th International Workshop on Recent Trends of Internet of Softwarized Things, 2023.

◇ **Turner Dissertation Award 2014** of the Computer Science Department of *Washington University in St Louis.*

◇ Kevin Novins Fellow of University of Otago, New Zealand 2023.

◇ IEEE Senior Member.

◇ Bangladesh Prime Minister's Award for securing the 2nd position (secondary school) and the 3rd position (higher secondary) in merit list.

RESEARCH
GRANT

◇ $570,016 (total **$1.2M** with UNLV) **NSF** Grant   2023 − 2027
Collaborative Research: CNS Core: Medium: Parallel and Real-Time Multicore Scheduling for an Efficiently-Used Cache (PARSEC)
PI: Abusayeed Saifullah, Nathan Fisher

◇ $302,308 **DoD** (Office of Naval Research) Grant   2023 − 2026
Handling Coexistence of LPWAN with Other Networks
PI: Abusayeed Saifullah

◇ $500,000 **NSF** Grant   2020 − 2024
CNS Core: Small: Low-Power Wide-Area Networks for Industrial Automation
PI: Abusayeed Saifullah (100%)

◇ $550,531 **NSF** Grant   2019 − 2024
CAREER: Protocols for Low-Power Wide-Area Networks over White Spaces
PI: Abusayeed Saifullah

◇ $303,631 **DoD** (Office of Naval Research) Grant   2021 − 2023
Handling Jamming of LPWANs
PI: Abusayeed Saifullah

◇ $163,796 **NSF** Grant   2021 − 2022
Collaborative Research: PPoSS: Planning: Scaling Autonomous Vehicle Systems at the Edge: from On-Board Processing to Cloud Infrastructure
PIs: Daniel Grosu (PI), Nathan Fisher (Co-PI), Abusayeed Saifullah (Co-PI), Marco Brocaneli (Co-PI), Weisong Shi (Co-PI)

◇ $175,000 **NSF** Grant   2016 − 2018

CRII: NeTS: Towards the Design of a Large-Scale Wireless Sensor Network
PI: Abusayeed Saifullah

⋄ $500,000 (total) **NSF** grant   2014 – 2016
NeTS: Small: Real-Time Wireless Sensor-Actuator Networks
PIs: Chenyan Lu (PI), Yixin Chen, and Abusayeed Saifullah

⋄ $63,102 WSU Graduate School Research Grant   2018 – 2019
Scalable Cross-Layer Design for Real-Time Wireless Control Systems
PI: Abusayeed Saifullah

⋄ $20,000 WSU Competitive Research Grant   2018 – 2020
Energy-Aware Parallel Real-Time Systems
PI: Abusayeed Saifullah

SERVICE

⋄ **Journal Editor**
▷ Asso. Editor, *ACM Trans. on Cyber-Physical Systems*   2023 – present
▷ Editor, Elsevier *Pervasive and Mobile Comp. (PMC)*   2018 – present
▷ Guest Editor, *IEEE Internet of Things*   2020 – 21
▷ Guest Editor, *PMC*, SI on mobile and social sensing   2019 – 20
▷ Guest Editor, *IEEE Trans. on Industrial Informatics*   2016 – 18

⋄ **Conference/Workshop Chair**
▷ Workshop and Tutorial Chair, ACM EWSN   2024
▷ General Co-Chair, IEEE ICESS   2021
▷ Program Co-Chair, IEEE ICESS   2020
▷ Co-Chair, Wireless Ad Hoc, Mesh Networks Track, IEEE ICCCN   2019
▷ Co-Chair, LPNET (EWSN Workshop on LPWANs for IoT)   2019
▷ Chair, IEEE RTAS Work in Progress Track   2018
▷ Chair, Poster Track, ACM/IEEE IoTDI   2018

⋄ **Conference Technical Program Committee Member**
▷ RTAS, EWSN   2024
▷ RTSS, RTAS, DCOSS, EWSN, IWQoS, SECON   2023
▷ RTAS, IoTDI, DCOSS, RTSS, SECON   2022
▷ ICCPS, SECON, IWQoS, BigData, MASS   2021
▷ RTSS, INFOCOM, IWQoS, BigData, MASS   2020
▷ RTSS, ICII, RTCSA, INFOCOM, IWQoS, MASS, RTNS, BigData 2019
▷ SenSys, ICCPS, IoTDI, INFOCOM, EWSN, ICII   2018
▷ SenSys, ICCPS, IoTDI, INFOCOM, EWSN, RTAS, RTCSA   2017
▷ RTSS, INFOCOM, MobiHoc, RTAS, RTCSA, SMARTCOMP   2016
▷ RTSS, RTCSA, SMARTCOMP   2015
▷ RTSS, SMARTCOMP   2014

◇ **Department/University Committee**
  ▷ Research Advisory Committee, Wayne State Univ.   2023 – 2024
  ▷ Faculty Search Committee, Wayne State University 2018 – 19, 2022–23
  ▷ Ranking and Reputation Committee, Wayne State   2020 – 21, 2022–24
  ▷ Graduate Committee, Wayne State University 2017 – 2021, 2022–2024

◇ **Conference Ranking Committee**
  ▷ CORE Ranking Committee   2023

PUBLICATION ◇ Sezana Fahmida, Venkata Modekurthy, and **Abusayeed Saifullah**; "Handling Coexistence of LPWANs through Embedded Reinforcement Learning"; In ACM/IEEE **IoTDI '23** *(The ACM/IEEE Conf. on Internet-of-Things Design and Implementation)*; pp. 410–423; **CPS-IoT Week** 2023; 2023.

◇ Mahbubur Rahman and **Abusayeed Saifullah**, "Boosting reliability and energy-efficiency in indoor LoRa"; In ACM/IEEE **IoTDI '23** *(The ACM/IEEE Conf. on Internet-of-Things Design and Implementation)*; pp. 396–409; **CPS-IoT Week** 2023; 2023.

◇ Corey Tessler, Prashant Modekurthy, Nathan Fisher, **Abusayeed Saifullah**, Alleyn Murphy; "Co-Located Parallel Scheduling of Threads to Optimize Cache Sharing"; Accepted to appear in IEEE **RTSS '23** *(The 43rd IEEE Real-Time Systems Symposium)*; pp. 1–12; 2023.

◇ Ashikul Haque and **Abusayeed Saifullah**; "A Game-Theoretic Approach for Mitigating Jamming Attacks in LPWAN"; accepted to appear in ACM **EWSN '23** (The 20th International Conference on Embedded Wireless Systems and Networks); pp. 1–12; 2023.

◇ Ashik Bhuiyan, Mohammad Pivezhandi, Zhishan Guo, Jing Li, Venkata Modekurthy, and **Abusayeed Saifullah**; "Precise Scheduling of DAG Tasks with Dynamic Power Management"; In **ECRTS '23** (The 35th Euromicro Conference on Real-Time Systems); Article No. 8; pp. 8:1–8:24; Leibniz International Proceedings in Informatics; 2023.

◇ Dali Ismail and **Abusayeed Saifullah**; "A Wireless System to Track Communicable Disease Outbreaks"; In *SoCIeTY '23 (International Workshop on Societal Computing for the Internet of Things & You)*; pp. 1–6; 2023.

◇ Ashikul Haque and **Abusayeed Saifullah**; "Scalable Real-Time Control in Industrial Cyber-Physical Systems"; In *SDN-CPS '23 (International Workshop on Software-defined Network for Cyber Physical System Automation)*; pp. 1–6; 2023.

⬦ Sezana Fahmida, Dali Ismail, Venkata Modekurthy, Aakriti Jain, and **Abusayeed Saifullah**; "Enabling Real-Time Communication over LoRa Networks"; In ACM/IEEE **IoTDI '22** *(The ACM/IEEE Conf. on Internet-of-Things Design and Implementation)*; pp. 14–27; **CPS-IoT Week** 2022; 2022.

⬦ Mahbubur Rahman and **Abusayeed Saifullah**, "T-IoT: Transparent and Tamper-Proof Event Ordering in the Internet of Things Platforms", vol. 10, no. 6, pp. 5335-5348; In *IEEE Internet of Things*; 2022.

⬦ Qaisar Bashir, Mohammad Pivezhandi, and **Abusayeed Saifullah**; "Energy- and Temperature-Aware Scheduling: From Theory to an Implementation on Intel Processor"; in *ICESS '22* (the 18th IEEE International Conference on Embedded Software and Systems); pp. 1–9; 2022.

⬦ Venkata Modekurthy, Mahbubur Rahman, and **Abusayeed Saifullah**; "Towards Mixed Criticality Industrial Wireless Sensor-Actuator Network"; In *IoST-5G&B '22*) The 4th International Workshop on Recent Trends of Internet of Softwarized Things; pp. 1–6; 2022.

⬦ Venkata Modekurthy, Dali Ismail, Mahbubur Rahman, and **Abusayeed Saifullah**; "Low-latency in-band integration of multiple low-power wide-area networks", In IEEE **RTAS '21** *(The 27th IEEE Real-Time and Embedded Technology and Applications Symposium)*; pp. 333 – 346; 2021.

⬦ Dali Ismail and **Abusayeed Saifullah**, "Mobility in low-power wide-area networks over White Spaces", in ACM **EWSN '21** *(The 18th International Conference on Embedded Wireless Systems and Networks)*; pp. 127–138; 2021. **Best Paper Award Nominee**.

⬦ Venkata Modekurthy, **Abusayeed Saifullah**, and Sanjay Madria; "A distributed real-time scheduling system for industrial wireless networks"; In **ACM Transactions on Embedded Computing Systems**; Vol. 20; No. 5; pp. 1–28; 2021.

⬦ Mahbubur Rahman, Dali Ismail, Prashant Modekurthy, **Abusayeed Saifullah**; "LPWAN in the TV White Spaces: A practical implementation and deployment experiences"; In **ACM Trans. on Embedded Computing Systems**; Vol. 20; No. 4; pp. 1 – 26; 2021.

⬦ Ashik Bhuiyan, Kecheng Yang, Samsil Arefin, **Abusayeed Saifullah**, Nan Guan, and Zhishan Guo; "Mixed-criticality real-time scheduling of gang task systems"; extended version of RTSS '19 paper; In Springer **Real-Time Systems**; **Special Issue** on RTSS '19 selected papers; Vol. 57, pp. 268–301; 2021.

⬦ Sezana Fahmida, Venkata Modekurthy, Mahbubur Rahman, **Abusayeed Saifullah**, Marco Brocanelli; "Long-Lived LoRa: Prolonging the Lifetime

⋄ of a LoRa Network"; in IEEE **ICNP '20** *(The 28th IEEE International Conference on Network Protocols)*; pp. 1–12; 2020. Acceptance rate: 16.8%.

⋄ Corey Tessler, Venkata Modekurthy, Nathan Fisher, **Abusayeed Saifullah**; "Bringing Inter-Thread Cache Benefits to Federated Scheduling"; In IEEE/USENIX **RTAS '20** *(The 26th IEEE/USENIX Real-Time and Embedded Technology and Applications Symposium)*; pp. 281– 295; 2020. Acceptance rate: 27%.

⋄ **Abusayeed Saifullah**, Sezana Fahmida, Venkata Prashant Modekurthy, Nathan Fisher and Zhishan Guo; "CPU Energy-Aware Parallel Real-Time Scheduling"; In **ECRTS '20** *(The 32nd Euromicro Conference on Real-Time Systems)*; pp. 1– 24; 2020.

⋄ Mahbubur Rahman and **Abusayeed Saifullah**, "Integrating low-power wide-area networks for enhanced scalability and extended coverage"; In **ACM/IEEE Transactions on Networking**; Vol. 28, No. 1, pp. 413–426; 2020.

⋄ P Ferrari, E Sisinni, **Abusayeed Saifullah**, R. C. S. Machado, Sa A. O. De, M Felser; "Work-in-Progress: Compromising security of real-time Ethernet using selective queue saturation attack"; In IEEE WFCS '20 (16th IEEE International Conference on Factory Communication Systems); pp. 1–4; 2020.

⋄ Ashikahmed Bhuiyan, Di Liu, Aamir Khan, **Abusayeed Saifullah**, Nan Guan, and Zhishan Guo; "Energy-Efficient parallel real-time scheduling on clustered multi-core"; In **IEEE Transactions on Parallel and Distributed Systems**; Vol. 31, No. 9, pp. 2097 – 2111; 2020.

⋄ Mahbubur Rahman, Dali Ismail, Prashant Modekurthy, **Abusayeed Saifullah**; "Implementation of low-power wide-area network in white spaces for practical deployment"; pp. 178 – 189; In ACM/IEEE **IoTDI '19** *(The 4th ACM/IEEE Conference on Internet-of-Things Design and Implementation)*; 2019 Acceptance rate: 28%.

⋄ Xi Jin, **Abusayeed Saifullah**, Chenyang Lu, and Peng Zeng; "Real-time scheduling for event-triggered and time-triggered flows in industrial wireless sensor-actuator networks", In IEEE **INFOCOM '19** *(The IEEE International Conference on Computer Communication)*; pp. 1684 – 1692; 2019. Acceptance rate: 19.7%.

⋄ Venkata Modekurthy and **Abusayeed Saifullah**; "Online period selection for wireless control systems", In IEEE **ICII '19** *(The 2nd IEEE International Conference on Industrial Internet)*; pp. 1–10; 2019. Acceptance rate: 16.7%.

⋄ Venkata Modekurthy*, **Abusayeed Saifullah***, and Sanjay Madria; "DistributedHART: A distributed real-time scheduling system for WirelessHART networks"; pp. 216 – 227; In IEEE **RTAS '19** *(The 25th IEEE Real-Time and Embedded Technology and Applications Symposium)*; 2019; *Co-first-author; Acceptance rate: 25.8%.

⋄ Ashik Bhuiyan, Kecheng Yang, Samsil Arefin, **Abusayeed Saifullah**, Nan Guan, and Zhishan Guo; "Mixed-criticality multicore scheduling of real-time gang task systems"; In IEEE **RTSS '19** *(The 39th IEEE Real-Time Systems Symposium)*; pp. 469–480; 2019. Acceptance rate: 21%. **Best Student Paper Award**.

⋄ Zhishan Guo, Ashikahmed Bhuiyan, Aamir Khan, Di Liu, Nan Guan, **Abusayeed Saifullah**; "Energy-efficient real-time scheduling of DAGs on clustered multi-core platforms"; pp. 156 – 168; In IEEE **RTAS '19** *(The 25th IEEE Real-Time and Embedded Technology and Applications Symposium)*; 2019; Acceptance rate: 25.8%.

⋄ **Abusayeed Saifullah**, Sriram Sankar, Jie Liu, Chenyang Lu, Ranveer Chandra, and Bodhi Priyantha; "CapNet: Exploiting wireless sensor network for data center power capping"; extended version of RTSS '14 paper; In **ACM Transactions on Sensor Networks**; Vol. 15, No. 1, pp. 6:1 – 6:36; 2019.

⋄ Mahbubur Rahman and **Abusayeed Saifullah**; "A Comprehensive survey on networking over TV white spaces", In Elsevier **Pervasive and Mobile Computing**; Vol. 59; pp. 1– 30; 2019.

⋄ Dali Ismail, Mahbubur Rahman, and **Abusayeed Saifullah**, "Low-power wide-area networks: Opportunities, challenges, and directions", in *Workshop on Smart Connected Communities (SCC '18)* with ACM ICDCN 2019; Invited paper; pp. 8:1–8:6; 2018.

⋄ Mahbubur Rahman and **Abusayeed Saifullah**, "Integrating low-power wide-area networks in white spaces", In ACM/IEEE **IoTDI '18** *(The 3rd ACM/IEEE Conference on Internet-of-Things Design and Implementation)*; 2018. Acceptance rate: 27%.

⋄ Venkata Modekurthy, Dali Ismail, Mahbubur Rahman, **Abusayeed Saifullah**; "A utilization based approach for schedulability analysis in wireless control systems", in IEEE **ICII '18** *(The 1st IEEE International Conference on Industrial Internet)*; pp. 49 – 58; 2018. Acceptance rate: 27.27%. **The Best Paper Award**.

⋄ Venkata Modekurthy, **Abusayeed Saifullah**, and Sanjay Madria; "Distributed graph routing for WirelessHART networks", in ACM **ICDCN '18** *(The 19th International Conference on Distributed Computing and*

Networking); Invited paper; pp. 24:1– 24:10; 2018.

◇ **Abusayeed Saifullah**, Mahbubur Rahman, Dali Ismail, Chenyang Lu, Jie Liu, and Ranveer Chandra; "Low-power wide-area network over white spaces", In **IEEE/ACM Transactions on Networking**; Vol. 26, No. 4; pp. 1893 – 1906; 2018.

◇ Dali Ismail, Mahbubur Rahman, and **Abusayeed Saifullah**, "Demo: Implementing SNOW on commercial off-the-shelf devices", in ACM/IEEE **IoTDI '18** (ACM/IEEE International Conference on Internet-of-Things Design and Implementation); pp. 312-313; 2018.

◇ Mahbubur Rahman, Dali Ismail, **Abusayeed Saifullah**; "Demo: Enabling inter-SNOW concurrent P2P communications"; in ACM/IEEE **IoTDI '18** (ACM/IEEE International Conference on Internet-of-Things Design and Implementation); pp. 310-311; 2018.

◇ Emiliano Sisinni, **Abusayeed Saifullah**, Song Han, Ulf Jennehag, Mikael Gidlund, "Industrial Internet of Things: Challenges, opportunities, and directions", In **IEEE Transactions on Industrial Informatics**; Vol. 14, No. 11; pp. 4724 – 4734; 2018.

◇ Ashikahmed Bhuiyan, Zhishan Guo, **Abusayeed Saifullah**, Nan Guan, and Haoyi Xiong; "Energy-efficient real-time scheduling of DAG tasks"; extended version of ECRTS '17 paper; In **ACM Transactions on Embedded Computing Systems**; Vol. 17, No. 5; pp. 1–25; 2018.

◇ Mikael Gidlund, Song Han, Emiliano Sisinni, **Abusayeed Saifullah**, Ulf Jennehag, "From industrial wireless sensor networks to industrial Internet of Things", In **IEEE Transactions on Industrial Informatics**; Vol. 14, No. 5; pp. 2194-2198; 2018.

◇ **Abusayeed Saifullah**, Mahbubur Rahman, Dali Ismail, Chenyang Lu, Jie Liu, and Ranveer Chandra; "Enabling reliable, asynchronous, and bidirectional communication in sensor networks over white spaces", In ACM **SenSys '17** (*The 15th ACM Conference on Embedded Networked Sensor Systems)*; pp. 9:1–9:14; 2017; Acceptance rate: 17%.

◇ Zhishan Guo, Ashikahmed Bhuiyan, **Abusayeed Saifullah**, Nan Guan and Haoyi Xiong; "Energy-efficient multi-core scheduling for real-time DAG tasks"; In **ECRTS '17** (*The 29th Euromicro Conference on Real-Time Systems)*; pp. 22:1-22:21; 2017. Acceptance rate: 21%.

◇ Dali Ismail, Mahbubur Rahman, Venkata Modekurthy, **Abusayeed Saifullah**; "Work-in-Progress: Utilization based schedulability analysis for wireless sensor-actuator networks", in IEEE *RTAS '17 Work-in-Progress*; pp. 137 – 140; 2017.

◇ Dali Ismail, Mahbubur Rahman, **Abusayeed Saifullah**, Sanjay Madria; "RnR: Reverse & Replace decoding for collision recovery in wireless sensor networks", in IEEE **SECON '17** *(The 14th IEEE International Conference on Sensing, Communication and Networking)*; pp. 1–9; 2017; Acceptance rate: 26.5%.

◇ **Abusayeed Saifullah**, Mahbubur Rahman, Dali Ismail, Chenyang Lu, Ranveer Chandra, and Jie Liu, "SNOW: Sensor network over white spaces", in ACM **SenSys '16** *(14th ACM Conference on Embedded Networked Sensor Systems)*; pp. 272–285; 2016. Acceptance rate: 17%. **Best Paper Award Nominee**.

◇ Chengjie Wu, D Gunatilaka, **Abusayeed Saifullah**, Mo Sha, P Tiwari, Chenyang Lu, Yixin Chen; "Maximizing network lifetime of WirelessHART networks under graph routing"; In ACM/IEEE **IoTDI '16** *(The 1st ACM/IEEE Conference on Internet-of-Things Design and Implementation)*; pp. 176–186; 2016. Acceptance rate: 20.8%.

◇ Chenyang Lu, **Abusayeed Saifullah**, Bo Li, Mo Sha, Humberto Gonzalez, Dolvara Gunatilaka, Chengjie Wu, Lanshun Nie, and Yixin Chen; "Real-time wireless sensor-actuator networks for industrial cyber-physical systems"; Special Issue on Industrial Cyber-Physical Systems; In **Proceedings of the IEEE**; Vol. 104, No. 5; pp. 1013–1024; 2016.

◇ **Abusayeed Saifullah**, P Tiwari, Mo Sha, Dolvara Gunatilaka, Bo Li, Chengjie Wu, Chenyang Lu, and Yixin Chen; "Schedulability analysis under graph routing for WirelessHART networks"; In IEEE **RTSS '15** *(The 36th IEEE Real-Time Systems Symposium)*; pp. 165–174; 2015. Acceptance rate: 22.5%.

◇ **Abusayeed Saifullah**, You Xu, Chenyang Lu, and Yixin Chen; "End-to-end communication delay analysis in industrial wireless networks"; In **IEEE Transactions on Computers**; Vol. 64; No. 5; pp. 1161–1174; 2015.

◇ Jianli Pan, Raj Jain, Subharthi Paul, Tam Vu, **Abusayeed Saifullah**, and Mo Sha; "An Internet of Things framework for smart energy in buildings: Designs, prototype, and experiments", In **IEEE Internet of Things**; Vol. 2; No. 6; pp. 527–537; 2015.

◇ **Abusayeed Saifullah**, Sriram Sankar, Jie Liu, Chenyang Lu, Ranveer Chandra, and Bodhi Priyantha; "CapNet: A wireless management network for data center power capping"; In IEEE **RTSS '14** *(The 35th IEEE Real-Time Systems Symposium)*; pp. 334–345; 2014. Acceptance rate: 21%. **Best Paper Award**.

◇ Jing Li, J-Jia Chen, Kunal Agrawal, Chenyang Lu, Christopher Gill,

Abusayeed Saifullah; "Analysis of federated and global scheduling for parallel real-time tasks"; In ***ECRTS '14*** *(The 26th Euromicro Conference on Real-Time Systems)*; pp. 85–96; 2014. Acceptance rate: 22%.

◇ Chengjie Wu, Mo Sha, Dolvara Gunatilaka, **Abusayeed Saifullah**, Chenyang Lu, Yixin Chen; "Analysis of EDF scheduling for wireless sensor-actuator networks"; In ACM/IEEE ***IWQoS '14*** *(ACM/IEEE Symposium on Quality of Service)*; pp. 31–40; 2014. Acceptance rate: 23.8%.

◇ **Abusayeed Saifullah**, David Ferry, Jing Li, Kunal Agrawal, Chenyang Lu, Christopher Gill; "Parallel real-time scheduling of DAGs"; In ***IEEE Transactions on Parallel and Distributed Systems***; Vol. 25; No. 12; pp. 3242 – 3252; 2014.

◇ **Abusayeed Saifullah**, C Wu, Paras Tiwari, You Xu, Yong Fu, Chenyang Lu, Yixin Chen; "Near optimal rate selection for wireless control systems" (extended RTAS '12 paper); In ***ACM Transactions on Embedded Computing Systems***; Vol. 13, No. 4s; Article 128; pp. 1–25; 2014; **Special Issue** on Real-Time Embedded Computing.

◇ Abusayeed Saifullah; "Real-time wireless sensor-actuator network for cyber-physical systems"; *PhD Thesis*; pp. 1–318; 2014; Department of Computer Science and Engineering, Washington University in St Louis., Missouri, USA. **Turner Dissertation Award**.

◇ **Abusayeed Saifullah**, Jing Li, Kunal Agrawal, Chenyang Lu, and Christopher Gill; "Multi-core real-time scheduling for generalized parallel task models" (extended version of RTSS '11 paper); In Springer ***Real-Time Systems***; Vol. 49, No. 4, pp. 404–435; 2013; **Special Issue** on RTSS '11 selected papers.

◇ **Abusayeed Saifullah**, You Xu, Chenyang Lu, and Yixin Chen; "Distributed channel allocation protocols for wireless sensor networks"; In ***IEEE Transactions on Parallel and Distributed Systems***; Vol. 25, No. 9; pp. 2264 – 2274; 2013.

◇ **Abusayeed Saifullah**, C Wu, P Tiwari, Y Xu, Y Fu, Chenyang Lu, Yixin Chen; "Near optimal rate selection for wireless control systems"; In IEEE ***RTAS '12*** *(The 18th IEEE Real-Time and Embedded Tech. and Applications Symposium)*; pp. 231–240; 2012. Acceptance rate: 23.6%. **Best Paper Nominee**.

◇ **Abusayeed Saifullah**, Kunal Agrawal, Chenyang Lu, and Christopher Gill; "Multi-core real-time scheduling for generalized parallel task models"; In IEEE ***RTSS '11*** *(The 32nd IEEE Real-Time Systems Symposium)*; pp. 217–226; 2011. Acceptance rate: 20.9%. **Best Student Paper Award**.

◇ **Abusayeed Saifullah**, You Xu, Chenyang Lu, and Yixin Chen; "End-

to-end delay analysis for fixed priority scheduling in WirelessHART networks"; In IEEE **RTAS '11** *(The 17th IEEE Real-Time and Embedded Technology and Applications Symposium)*; pp. 13–22; 2011. Acceptance rate: 20.9%.

◇ **Abusayeed Saifullah**, You Xu, Chenyang Lu, Yixin Chen; "Priority assignment for real-time flows in WirelessHART networks"; In **ECRTS '11** *(The 23rd Euromicro Conference on Real-Time Systems)*; pp. 35–44; 2011. Acceptance rate: 21%.

◇ **Abusayeed Saifullah** and Yung H. Tsin; "Self-stabilizing computation of 3-edge-connected components"; In **International Journal of Foundation of Computer Science**; Vol. 22, No. 5, pp. 1161-1185; 2011.

◇ **Abusayeed Saifullah** and Yung H. Tsin; "A self-stabilizing algorithm for 3-edge-connectivity" (extended version of ISPA '07 paper); In **International Journal of High Performance Computing and Networking**; Vol. 7, No. 1, pp. 40-52; 2011; **Special Issue** on selected ISPA '07 Papers.

◇ **Abusayeed Saifullah**, You Xu, Chenyang Lu, and Yixin Chen; "Real-time scheduling for WirelessHART networks"; In IEEE **RTSS '10** *(The 31st IEEE Real-Time Systems Symposium)*; pp. 150–159; 2010. Acceptance rate: 25%.

◇ You Xu, **Abusayeed Saifullah**, Yixin Chen, Chenyang Lu, S. Bhattacharya; "Near optimal multi-application allocation in shared sensor networks"; In ACM **MobiHoc '10** *(The 11th ACM International Symposium on Mobile Ad Hoc Networking and Computing)*; pp. 181–190; 2010. Acceptance rate: 16.6%.

◇ Sangeeta Bhattacharya, **Abusayeed Saifullah**, Chenyang Lu, and Grui Catalin Roman; "Multi-application deployment in shared sensor networks based on quality of monitoring"; In IEEE **RTAS '10** *(The 16th IEEE Real-Time and Embedded Technology and Applications Symposium)*; pp. 259–268; 2010. Acceptance rate: 22%.

◇ **Abusayeed Saifullah** and Alper Üngör; "A simple algorithm for triconnectivity of a multigraph"; In **CATS '09** *(The 15th Computing: The Australasian Theory Symposium)*; pp. 53–62; 2009. Acceptance rate: 44.2%.

◇ **Abusayeed Saifullah** and Yung Tsin; "A self-stabilizing algorithm for 3-edge connectivity"; In **ISPA '07** *(The 5th International Symposium on Parallel and Distributed Processing and Applications)*; **Lecture Notes in Computer Science**; vol. 4742. pp. 6-19; 2007. Acceptance rate: 34%. **Best Student Paper Award**.

GOOGLE SCHOLAR PROFILE

⬦ Citations: 6,000

⬦ h-index: 31

⬦ i10-index: 51

⬦ Link: https://scholar.google.com/citations?user=CYwffSUAAAAJ