Edge-AI for MESA (Mechatronics Embedded Systems and Automation)

The 2019 Symposium on "AI and Emerging Technologies for MESA (Mechatronics Embedded Systems and Automation)"

(AIET for MESA)

as a part of the

The 2019 ASME/IEEE International Conference on Mechatronics and Embedded Systems and Applications

(The 15th ASME/IEEE MESA2019 CFP)

August 18-21, 2019, Anaheim Convention Center, Anaheim, CA, USA

http://iel.ucdavis.edu/mesa/conferences.php and https://www.asme.org/events/idetccie

(Please check out two other symposia collocated: SUAVTA, FDTA)

Enabled by cloud to edge to embedded computing, artificial intelligence (AI) and emerging technologies for MESA (Mechatronics Embedded/Edge Systems and Automation) are becoming an integrated topic area in mechatronics as we see it today. Making mechatronics systems smarter and smarter enpowered by AI in cloud, edge, or embedded levels, is a ubiquitous theme in mechatronics research, education and developments (RED). Smartness is signified by the traits of, per NSF, 1/ cognizant, 2/ taskable, 3/ adaptive, 4/ ethical and 5/ knowledge-rich.

For 2019 AIET Symposium under ASME/IEEE MESA19, papers are solicited in the area of AI and emerging technologies for MESA related applications. The subjects of the papers may include, but are not limited to,

- cloud/edge computing empowered MESA systems
- edge AI for embedded systems
- deep learning control
- energy efficiency MESA systems using informatics
- big data driven health aware mechatronic system operation
- human factor and human experience transfer learning
- human-centric mechatronics
- Human mechatronics sharing control
- ...
- other emerging topics for MESA systems.

Paper submission is a two stage process. Papers with the e-mail addresses of the authors must be submitted online abstract(s) at https://www.asme.org/events/idetccie by March 4th, 2019. After the abstract submission, you MUST

Recent News Items

Congratulations to Haoyu Niu for publishing long review paper on ET estimate by sUAS
December 27, 2020
Professor Chen was invited to serve the new journal GNC (Guidance Navigation Control)
December 27, 2020
MESA Lab welcomes new members in Spring 2021
December 26, 2020
Congratulations to Haoyu Niu for winning a $10K grant from Bayer Crop Science
December 26, 2020

Latest News

- 2020
- 2019
- 2018
- 2017
- 2016
- 2015
- 2014
- 2013
- 2012

Recent Events

- Interested in Joining the Lab?
- MESA LAB got 9 FAA COAs!
- MESA Lab in the News
- UCM 2020 Initiative Proposal - CIDER (California Institute of Drone Engineering Research)

also submit a full length paper for peer review by March 4th, 2019. This deadline is final - so be on time or earlier! All manuscripts after a successful review procedure will be published in the conference proceedings. It will be EI-indexed and published online. For further information, please contact AIET2019 Anaheim symposium organizers:

- **Contact the symposium chairs:**
  - Professor Chang, Ching-Yuan, Optical Metrology and Experimental Mechanics Laboratory, Dept. of Mechanical Engineering, National Taipei University of Technology, Taipei, Taiwan, ROC, Email: chang@mail.ntut.edu.tw W: taipeitech.info
  - Professor YangQuan Chen, MESA LAB, School of Engineering, University of California, Merced, CA 95343, USA. E:yqchen@ieee.org;W:mechatronics.ucmerced.edu

- **External links**
  - Edge computing
  - TheEdgeAI.com

- MESA LAB Robots & Ribs Symposium Series
- Fractional Calculus Day @ UCMerced
- Publications

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