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EDUCATION	Ph.D. in Electrical Engineering (minor in CS), Iowa State University, Ames IA, 4.0/4.0	12/2014
	B. S. in Automation, Zhejiang University, Hangzhou China	06/2009
Interests	Systems and Control, Artificial Intelligence, Intelligent Vehicles, Power & Energy Systems	S
EMPLOYMENT	Oakland University, Rochester, MI, USA	
	- Associate Professor, Department of Electrical and Computer Engineering	08/2024-present
	- Assistant Professor, Department of Electrical and Computer Engineering	08/2020-08/2024
	General Motors, Michigan, USA	
	- Senior Control Systems Engineer, Vehicle and Propulsion Control, Milford	01/2017-08/2020
	- Summer Intern, Software V&V, Warren (GM R&D)	04/2014-07/2014
	Idaho National Laboratory, Idaho Falls, ID, USA	
	- R&D Scientist, Power and Energy Systems	11/2014-12/2016
	Iowa State University, Ames, IA, USA	
	- Research Assistant, Stochastic Hybrid Systems	01/2011-10/2014
	- Teaching Assistant, Electrical Engineering	01/2011-12/2013
HONORS AND	NSF CAREER Award, National Science Foundation	2022
RECOGNITIONS	Best Paper Award, IEEE Transactions on Automation Science and Engineering	2016
	Best Paper Award, IEEE International Conference on Electro-Information Technology	2023
	IEEE Senior Member	2020
	Associate Editor, IEEE MOST Conference	2025–present
	Associate Editor, American Control Conference	2024–present
	Associate Editor, Modeling, Estimation, and Control Conference	2024–present
	Associate Editor, Systems Science & Control Engineering	2024–present
	Outstanding Graduate Mentor Award, Oakland University	2025
	Most Research Active Award, Oakland University	2024
	New Investigator Research Excellence Award, Oakland University	2024
	Most Active Grant Seeker Award, Oakland University	2023 & 2024
	Oakland County 40 Under 40, Oakland County	2024
	NSF CMMI Game Changer Academies (C-GCA) Panel Fellow, NSF	2024
	Faculty Recognition Award for Research, Oakland University	2023
	R&D 100 Award, R&D World	2023
	Associate Editor, IEEE Conference on Control Technology and Applications	2023–present
	Associate Editor, IEEE International Conference on Robotics and Automation	2020
	INL Publication Achievement Award, Idaho National Laboratory	2016
	INL Exceptional Contributions Program Award, Idaho National Laboratory	2015 & 2016
	Research Excellence Award, Iowa State University	2014
	Student Travel Award, American Control Conference	2014
	Third Class Scholarship for Undergraduate Student, Zhejiang University	2008
	Outstanding Student, Zhejiang University	2008
Honors by My	SECS Best Graduate Paper Award (Zhaodong Zhou), Oakland University	2024
ADVISEES	Undergraduate Research Competition Winner (Steven DeCoste), ASME ICE Division	2024
	Charles addate research competition willier (Steven Decoste), ASIME ICE DIVISION	2022

SELECTED GRANTS Total: \sim \$4.8m; As lead/sole PI: \sim \$1.3m; Personal share: \sim \$2m

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- [5] **Jun Chen**, "Development of a Virtual Reality Environment for Autonomous Vehicle Personalization," 05/2025–04/2026, University Research Committee, Oakland University.
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- [2] **Jun Chen**, "Optimal Scheduling of Edge Devices for Decentralized Data Preprocessing," 06/2024–05/2025, NSF IUCRC eCAT Center.
- [1] **Jun Chen**, "CAREER: Reconfigurable and Predictive Control with Reinforcement Learning Supervisor for Active Battery Cell Balancing," 01/2023–12/2027, NSF-ECCS-EPCN.

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(h-index: 22; <u>underline</u>: students under my close supervision; *: corresponding author)

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- [9] Jong S. Kim, **Jun Chen** and Humberto E. Garcia, "Modeling, Control, and Dynamic Performance Analysis of a Reverse Osmosis Desalination Plant Integrated within Hybrid Energy Systems," *Energy*, volume 112, pages 52–66, October 2016.
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- [33] <u>Luke Nuculaj</u>, Adam Kidwell, Connor Homayouni, Alex Fillmore, Darrin Hanna and **Jun Chen**, "Optimal FPGA Implementation of Dense Extended Kalman Filter for Simultaneous Cell State Estimation," *IEEE International Midwest Symposium on Circuits and Systems (MWSCAS)*, Springfield, MA, August 11–14, 2024.
- [32] Muye Jia, Mingyuan Tao, Meng Xu*, Peng Zhang, Jiayi Qiu, Gerald Bergsieker and **Jun Chen**, "RL-MPC: Reinforcement Learning Aided Model Predictive Controller for Autonomous Vehicle Lateral Control," 2024 SAE World Congress, Detroit, MI, April 16–18, 2024.
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- [30] Ali Irshayyid and Jun Chen*, "Highway Merging Control Using Multi-Agent Reinforcement Learning," *IEEE International Conference on Computing and Machine Intelligence*, Mount Pleasant, MI, April 13-14, 2024
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- [28] Zhaodong Zhou, **Jun Chen***, Mingyuan Tao, Peng Zhang and Meng Xu, "Experimental Validation of Event-Triggered Model Predictive Control for Autonomous Vehicle Path Tracking," *IEEE International Conference on Electro Information Technology*, Romeoville, IL, May 18–20, 2023. (**Best Paper Award**: link)
- [27] Yang Chen, **Jun Chen***, Chenang Liu, Guodong Liu, Maximiliano Ferrari and Aditya Sundararajan, "Integrated Modeling and Optimal Operation of Multi-Energy System for Coastal Community," *IEEE International Conference on Electro Information Technology*, Romeoville, IL, May 18–20, 2023.
- [26] Jun Chen* and Zhaodong Zhou, "Battery Cell Imbalance and Electric Vehicles Range: Correlation and NMPC-based Balancing Control," *IEEE International Conference on Electro Information Technology*, Romeoville, IL, May 18–20, 2023.
- [25] <u>Steven DeCoste</u>, <u>Antonio Scalzi</u>, **Jun Chen*** and Dan DelVescovo*, "Minimizing Steady-State Testing Time in an Engine Dynamometer Laboratory," 2023 SAE World Congress, Detroit, MI, April 18–20, 2023.
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