

SHIJIE 'ANTONIO' TONG

Davis, California, USA

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SUMMARY	A passionate and efficient engineer proficient in battery systems and information technology, available from March 6, 2015	
EDUCATION	Ph.D. in Mechanical Engineering	University of California Davis, 2014
	-Research focus: energy storage, smart grid, and battery management	
	-Dissertation: modeling, estimation and management of degraded lithium batteries	
	B.S. in Mechatronic Engineering	Zhejiang University, China, 2010
EXPERIENCE	Post-doctoral Researcher	University of California Davis, 2014~Present
	-Algorithm design in Matlab/Java/C to improve the accuracy of battery state-of-charge and state-of-health estimation	
	-Interfaced with government agencies regarding funding solicitations; Wrote research grant on carbon neutral energy storage for the California winery	
	Graduate Student Researcher	UC Davis, 2011~2014
	-Lead a pilot program reusing retired electric vehicle batteries for power grid storage	
	-Designed, planned, and built a stationary energy storage system for an energy efficient house	
	-Developed an energy management software for electricity smart grid, eliminating 90% of peak usage and cutting solar payback time by half	
	-Determined aging patterns of lithium battery through experiments and empirical model identification; incorporated the aging model into BMS algorithm design	
	Battery Pack Internship	Kleenspeed, Mountain View, CA, Jul.~Aug. 2012
	-Mechanical design of a battery pack including wiring, cooling, and packaging	
	Super Capacitor R&D Internship	DAE Tech, Davis, CA, Mar. 2012
	-Worked on lithium metal based super capacitor design and manufacturing	
	-Hands on experience with electrode preparation and glove box operation	
PATENT	S. Tong and J. Park, Methods for on-line estimation of battery SoC and SoH, U.S. Patent Pending 61/902,582, 2013	
AWARDS	Smart Grid Innovation Seed Funding, 2014	
	Energy Innovations Small Grant, 2011	
	Graduate Scholarship, University of California Davis, 2010	
	Excellent Student Scholarship, Zhejiang University, 2007~2009	
	Winner team mathematic modeling competition, Zhejiang University, 2008	
