

Kiwan Maeng

CONTACT INFORMATION	CIC 4th floor Carnegie Mellon University 4720 Forbes Avenue Pittsburgh, PA 15213	Homepage: https://kiwanmaeng.com Email: kmaeng@andrew.cmu.edu
RESEARCH INTERESTS	My research interests lie in building efficient and reliable systems for energy-harvesting devices. Energy-harvesting devices have no continuous power source (e.g., battery), instead operating on a scarce and unpredictable energy gathered by its harvester (e.g., solar panel). I seek to broaden the possibilities of such devices using co-design of hardwares, compilers, and runtime systems. <i>Research Area:</i> Energy-Harvesting Devices, Embedded Systems, IoT, Hardware-Software Co-Design, Compiler	
EDUCATION	Carnegie Mellon University , Pittsburgh, PA Ph.D. in Electrical and Computer Engineering - Advisor: Prof. Brandon Lucia Seoul National University , Seoul, Korea B.S. in Electrical and Computer Engineering <i>Graduated with Summa Cum Laude</i> (GPA: 4.14/4.30)	Aug 2016 – Aug 2016
REFERRED PAPERS	[1] Adaptive Dynamic Checkpointing for Safe Efficient Intermittent Computing Kiwan Maeng and Brandon Lucia OSDI 2018 - USENIX Symposium on Operating Systems Design and Implementation [2] Alpaca: Intermittent Execution without Checkpoints Kiwan Maeng , Alexei Colin and Brandon Lucia OOPSLA 2017 - Object-Oriented Programming, Systems, Languages & Applications	
OTHER PAPERS	[4] Getting Started with Intermittent Computing Brandon Lucia, Emily Ruppel, Kiwan Maeng , Graham Gobieski and Milijana Surbatovich MICRO 2018 (workshop, TBD) [5] Intermittent Computing: Challenges and Opportunities Brandon Lucia, Vignesh Balaji, Alexei Colin, Kiwan Maeng , and Emily Ruppel SNAPL 2017 [6] The Midnight Engineers (Book, Korean) Kiwan Maeng Science comicbook for non-majors (LINK). Won several awards including <i>10 Authors of the Year 2017</i> .	
AWARDS & HONORS	Korea Foundation for Advanced Studies Scholarship , KFAS Summa Cum Laude , Seoul National University National Scholarship for Science & Engineering , KOSAF	2016 – 2021 Aug 2016 2010 – 2016

WORK	Carnegie Mellon University , Pittsburgh, PA	Sep 2016 –
EXPERIENCE	Research Assistant with Prof. Brandon Lucia Developing hardware and software systems for energy-harvesting devices.	
	Seoul National University , Seoul, Korea	March 2015 – Aug 2016
	Research Intern with Prof. Hyuk-Jae Lee Developed hardware for computer vision.	
	Rsupport Inc. , Seoul, Korea	Feb 2013 – Dec 2015
	QA Engineer Developed internal test automation framework.	
GRADUATE	18-748 Wireless Sensor Networks	Spring 2018
COURSEWORK	18-643 Reconfigurable Logic: Technology, Architecture and Applications	Fall 2017
	18-797 Machine Learning for Signal Processing	Fall 2017
	15-745 Optimizing Compilers for Modern Architectures	Spring 2017
	18-742 Advanced Computer Architecture and Systems	Spring 2017
	14-642 Introduction to Embedded Systems	Fall 2016
	18-743 Energy Aware Computing	Fall 2016
REFERENCES	Available on request	