

Research Interests	Operating Systems, Mobile Computing, Device Drivers, Virtualization, Embedded Systems	
Education	Columbia University , New York, NY <i>Doctor of Philosophy (Ph.D.)</i> in Computer Science Advisor: Professor Jason Nieh	Aug 2012 – Present
	Columbia University , New York, NY <i>Master of Philosophy (M.Phil.)</i> in Computer Science	Aug 2012 – May 2015
	Columbia University , New York, NY <i>Master of Science (M.S.)</i> in Computer Science	Aug 2012 – Oct 2013
	Yale University , New Haven, CT <i>Master of Science (M.S.)</i> in Computer Science	Aug 2011 – May 2012
	University of Michigan , Ann Arbor, MI <i>Bachelor of Science (B.S.E.)</i> in Computer Engineering <i>Bachelor of Science (B.S.E.)</i> in Computer Science Engineering <i>Minors</i> : Mathematics, Physics	Aug 2004 – Apr 2008
Awards	University Graduate Ph.D./Research Fellowship Dean’s List , University of Michigan University Honors , University of Michigan	Fall 2012 – Present Fall 2007, Winter 2008 Fall 2007
Professional Experience	Columbia University <i>Graduate Researcher</i>	New York, NY Sept 2012 – Present
	<ul style="list-style-type: none"> • Participated in building Cider/Cycada (Android kernel to support running native iOS apps) • Working on a mobile device sharing framework • Investigating novel memory deduplication strategies 	
	VMware Inc. <i>Software Engineer II</i>	Palo Alto, CA Sept 2008 – Apr 2011
	<ul style="list-style-type: none"> • Worked on VMware Operating System (ESX) kernel and device driver development • Assigned as Networking developer lead for ESX 4.0 Update 3 release • Analyzed core dumps and code to root cause and fix various kernel and device driver bugs 	
Teaching Experience	Columbia University <i>Teaching Assistant, Operating Systems (COMS W4118)</i>	New York, NY Sept 2012 – Dec 2012
	<ul style="list-style-type: none"> • Modified Android kernel source used by over 150 students • Ported Android emulator to newer kernel branch to make it buildable for both emulator and device • Modified kernel to allow setting orientation and getting GPS coordinates from user space 	
Selected Publications	<p>N. AlDuaij, A. Van’t Hof, J. Nieh. “Heterogeneous Multi-Mobile Computing.” <i>Proceedings of the 17th Annual International Conference on Mobile Systems, Applications, and Services (MobiSys 2019)</i>, Seoul, South Korea. June 2019</p> <p>J. Andrus, A. Van’t Hof, N. AlDuaij, C. Dall, N. Viennot, J. Nieh. “Cider: Native Execution of iOS Apps on Android.” <i>Proceedings of the 19th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS 2014)</i>, Salt Lake City, UT, USA. March 2014</p>	
Skills	<p><i>Programming</i>: C, C++, Java, Assembly, PHP, HTML, Perl, Python, SQL, Matlab, sh, L^AT_EX</p> <p><i>Platforms</i>: UNIX, Linux, BSD, macOS, iOS, Android, VMware ESX, Microsoft Windows</p>	