

<b>Research Interests</b>	Operating Systems, Mobile Computing, Device Drivers, Virtualization, Embedded Systems	
<b>Education</b>	<b>Columbia University</b> , New York, NY <i>Doctor of Philosophy (Ph.D.)</i> in Computer Science (Systems) <i>Dissertation/Thesis:</i> Multi-Mobile Computing <i>Advisor:</i> Professor Jason Nieh	Aug 2012 – May 2020
	<b>Columbia University</b> , New York, NY <i>Master of Philosophy (M.Phil.)</i> in Computer Science <i>Master of Science (M.S.)</i> in Computer Science	Aug 2012 – May 2015 Aug 2012 – Oct 2013
	<b>Yale University</b> , New Haven, CT <i>Master of Science (M.S.)</i> in Computer Science	Aug 2011 – May 2012
	<b>University of Michigan</b> , 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
<b>Awards</b>	<b>University Graduate Ph.D./Research Fellowship</b> <b>Dean’s List</b> , University of Michigan <b>University Honors</b> , University of Michigan	2012 – 2020 Fall 2007, Winter 2008 Fall 2007
<b>Professional Experience</b>	<b>Columbia University</b> <i>Graduate Researcher</i>	New York, NY 2012 – 2020
	<ul style="list-style-type: none"> <li>• Participated in building Cider/Cycada (Android kernel to support running native iOS apps)</li> <li>• Building a mobile device sharing framework</li> <li>• Integrating multiple mobile systems to provide a more capable one</li> </ul>	
	<b>VMware Inc.</b> <i>Software Engineer II</i>	Palo Alto, CA Sept 2008 – Apr 2011
	<ul style="list-style-type: none"> <li>• Worked on VMware Operating System (ESX) kernel and device driver development</li> <li>• Assigned as Networking developer lead for ESX 4.0 Update 3 release</li> <li>• Analyzed core dumps and code to root cause and fix various kernel and device driver bugs</li> </ul>	
<b>Teaching Experience</b>	<b>Columbia University</b> <i>Teaching Assistant, Operating Systems (COMS W4118)</i>	New York, NY Sept 2012 – Dec 2012
	<ul style="list-style-type: none"> <li>• Modified Android kernel source used by over 150 students</li> <li>• Ported Android emulator to newer kernel branch to make it buildable for both emulator and device</li> <li>• Modified kernel to allow setting orientation and getting GPS coordinates from user space</li> </ul>	
<b>Selected Publications</b>	<p>N. AlDuaij, J. Nieh. “Tap: An App Framework for Dynamically Composable Mobile Systems.” <i>Proceedings of the 19th Annual International Conference on Mobile Systems, Applications, and Services (MobiSys 2021)</i>, Virtual. June 2021</p> <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>	
<b>Skills</b>	<i>Programming:</i> C, C++, Java, Assembly, PHP, HTML, Perl, Python, SQL, Matlab, sh, L <sup>A</sup> T <sub>E</sub> X <i>Platforms:</i> UNIX, Linux, BSD, macOS, iOS, Android, VMware ESX, Microsoft Windows	