

## Mark Khusid

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<b>Objective</b>	<b>A challenging position in electrical design engineering.</b>	
<b>University Education</b> 1995 – 2000	<b>Polytechnic University, Brooklyn, N.Y.</b> Bachelor of Science in Electrical and Computer Engineering Graduation Date: Spring 2000 GPA: 3.50 / 4.00	
<b>Course Work</b> <b>Polytechnic University</b> 1995 – 2000	Electronics I and II C, C++, Assembly and Pascal languages TCP/IP Analysis and Programming Electric Circuit Design and Testing	Wireless, Ethernet and ATM Networks Communications Engineering Data Acquisition VHDL Computer Design
<b>Honors &amp; Awards</b>	<ul style="list-style-type: none"><li>• Dean's List, Fall 1996 – June 2000</li><li>• William L. Everitt Student Award of Excellence</li><li>• IEEE Student Branch Award</li><li>• Best Project Award – 1999 Summer Junior Research Internship Program</li><li>• Professor Myron M. Rosenthal Scholarship</li></ul>	
<b>Employment</b>		
1/2014 – Present	<b>Electrical Engineering Consultant</b> <ul style="list-style-type: none"><li>• Consulted on and designed novel devices for solar power applications</li><li>• Constructed prototypes from concept to testing phase using engineering best practices</li><li>• Used LTSpice to simulate designs and verify concordance with test results from built prototypes</li><li>• Implemented out-of-the-box solutions to solve design and testing challenges in small scale and unique solar power applications</li></ul>	
7/2007 – 12/2013	<b>Moog, Inc., East Aurora, N.Y.</b> <b>Electrical Design Engineer</b> <ul style="list-style-type: none"><li>• Designed analog and power circuit card assemblies for mission-critical Electronic Control Units for the Taurus II, Delta IV and Centaur Launch Vehicles</li><li>• Designed, tested and implemented all-opamp Inductive Simulator for simulating servovalve dynamic response</li><li>• Designed test fixtures for 787 Aircraft program</li><li>• Analyzed complex circuits using pSpice, Mathcad and Matlab analysis software</li><li>• Prepared and presented designs to customers</li></ul>	
1/2007 – 7/2007	<b>Moog, Inc., East Aurora, N.Y.</b> <b>Engineering Technician</b> <ul style="list-style-type: none"><li>• Constructed test fixtures to test flight critical electronic circuit boards</li><li>• Coordinated with engineering to optimize test fixture construction and test procedures</li><li>• Performed development and production testing of flight critical electronic circuit boards</li></ul>	
2/2006 – 9/2006	<b>Keller Technology Corporation, Inc., Tonawanda, N.Y.</b> <b>Electrical Controls Engineer</b> <ul style="list-style-type: none"><li>• Designed electrical control systems for novel and complete manufacturing machinery</li><li>• Prepared drawing package of electrical schematics in AutoCAD Electrical 2006</li><li>• Researched and documented cost estimates to design and fabricate electrical control systems in response to user requirement specifications</li></ul>	

3/2003-2/2006	<b>MK Buffalo Unlimited, LLC, Buffalo, N.Y.</b> <b>Real Estate Investor</b> <ul style="list-style-type: none"> <li>• Acquired, rehabilitated and tenanted investment properties in the Buffalo, N.Y. area</li> <li>• Communicated with accountants, attorneys, brokers and other business consultants and acquired knowledge of their respective fields</li> <li>• Managed costs and rental income to insure business profitability</li> <li>• Acquired knowledge and skill in financial statements and business computer software</li> </ul>
9/2000 – 3/2003	<b>Space Technology Branch, US Army CECOM, Fort Monmouth, N.J.</b> <b>Computer Engineer</b> <ul style="list-style-type: none"> <li>• Designed, assembled, configured and installed mission-critical computer systems in fixed, Army vehicular and airborne assets</li> <li>• Performed extensive design, construction and field testing of Army tactical Wireless RF and Optical communications systems</li> <li>• Soldered and assembled prototype Army electronic, optical and RF circuits and systems</li> <li>• Configured routers, switches and transceiver communications components</li> <li>• Spliced and connectorized Army and commercial optical fiber cables and network cables</li> </ul>
1/1999 – 6/2000	<b>MP3L Laboratory, Polytechnic University, Brooklyn, N.Y.</b> <b>Research Assistant</b> <ul style="list-style-type: none"> <li>• Soldered and assembled experimental apparatus to study optical microresonators</li> <li>• Worked with laser diodes, optical fibers and interferometers</li> <li>• Machined an optical fiber – microsphere coupler to study telecommunications applications</li> </ul>
5/1997 – 8/1997	<b>Markperi International Enterprises Inc., Islandia, N.Y.</b> <b>CAD / Computer Consultant</b> <ul style="list-style-type: none"> <li>• Drafted electrical schematics and machine parts utilizing AutoCAD</li> <li>• Coordinated with technicians to improve existing drawings</li> <li>• Installed and maintained network over company computer systems</li> </ul>
<b>Publications</b>	N. J. Vallesterio, <b>M. Khusid</b> , N. S. Prasad, LTC J. Carrano, G. Duchak, J. Ricklin, M. Vorontsov, “Free-Space Optical Communications Systems (FOCUS): An Army Overview,” SPIE Photonics West Conference, Free – Space Laser Communication and Imaging II, Seattle, 9-11 January 2002
<b>Special Skills</b>	<ul style="list-style-type: none"> <li>• Learning cybersecurity tradecraft, vulnerability analysis, exploit development, writing shellcode for x86-64, x86 and ARM processors.</li> <li>• Proficient in basic web page design, web server operations, Amazon Web Services server administration, Docker Container deployment, and OpenVPN server administration.</li> <li>• Webmaster for <a href="http://www.mkdynamics.net">www.mkdynamics.net</a> and <a href="http://www.k2pca.org">www.k2pca.org</a></li> <li>• Proficient in Red Hat Fedora and Debian based Linux such as Fedora Core, Kali, Parrot OS, and Ubuntu, Whonix and TAILS.</li> <li>• Proficient in lathe and milling machine operations, electric circuit design, soldering and construction, computer assembly and troubleshooting, automotive maintenance and repair.</li> </ul>
<b>Hobbies</b>	<ul style="list-style-type: none"> <li>• Practicing penetration testing and Capture The Flag competitions on HackTheBox.eu</li> <li>• Licensed Amateur Radio Operator with Extra Class license. Licensed Volunteer Examiner by ARRL, Volunter Exam Coordinator.</li> <li>• Data communications using the AX25 over TCP/IP protocol on VHF Ham radios.</li> <li>• Raspberry Pi projects.</li> <li>• Practitioner of Tae Kwon Do, Shaolin Kungfu, swimming and weight lifting.</li> <li>• Camping, primitive survival and self-sufficiency</li> </ul>
<b>References</b>	Available upon request