

**Computer Vision / Machine Learning Research Engineer**

- Detailed working knowledge in: computer vision and machine learning; deep learning and parallel computing; mobile application in iOS, Android, cross-platform frameworks; database management based on MySQL and MongoDB; network protocol management and analysis; low-level file system
- 5+ years experience in software engineering / 1+ years experience in research in computer vision

EDUCATION	<b>NEW YORK UNIVERSITY</b> , New York, USA Candidate for M.S. in Computer Science (Courant Institute) <b>KOREA UNIVERSITY</b> , Seoul, Korea B.S. in Computer Science. 3-year scholarship. Worked in Network Security Lab	Sep 2015 - Present 2005 – 2009
COURSEWORK	Computer vision, Inference and Representation, Graphics Processing Units, Operating Systems, Algorithms, Programming Languages, Web Search Engines, Network Security, Low-level and Embedded System Design, Compiler	
SKILLS	Python, C++, Java, Lua, Matlab, SQL, CUDA/OpenCL, Tensorflow, Android, iOS, and REST API	
EXPERIENCE	<b>Computer Vision Group</b> , New York University <i>Research Assistant</i> <ul style="list-style-type: none"><li>▪ Developed an algorithm for representing images in frequency domain for motion reconstruction</li><li>▪ Developed an optical flow calculator and image recognition module by using the new representation and ML techniques (Patent applied for)</li><li>▪ Implemented GPU based libraries in favor of running our methods in real-time</li><li>▪ Participated in developing deep learning models for image and motion recognition</li></ul> <b>SUNDAR</b> , Boston, MA, USA <i>Software Engineer</i> ; Mobile trading platform for textile suppliers and designers, accelerated by TechStars <ul style="list-style-type: none"><li>▪ Fully developed Android application, collaborated closely with REST API developer</li><li>▪ Developed asynchronous image loader with aggressive caching for service in India (weak signal)</li></ul> <b>GIST</b> , Sunnyvale, California, USA <i>Co-founder, CTO</i> ; NLP-based mobile news service that clusters news articles and extracts key data <ul style="list-style-type: none"><li>▪ Developed server engine that clusters news articles, extracts key data, and prioritizes high-frequency contents; Designed both Android and iOS apps; implemented Android app</li></ul> <b>CYBER INFORMATION SECURITY AGENCY of KOREA</b> , Seoul, Korea <i>Research Engineer</i> ; Korea's national cyber security agency under the ministry of national defense <ul style="list-style-type: none"><li>▪ Developed geo-tracking, decryption, and performance interference algorithms for mobile devices</li></ul> <b>KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY</b> , Daejeon, Korea <i>Research Assistant</i> <ul style="list-style-type: none"><li>▪ Developed a multiplayer game mounted on treadmill and analyzed workout log</li><li>▪ Developed action detector using accelerometer and signal detection algorithm</li></ul> <b>SAMSUNG SOFTWARE MEMBERSHIP</b> , Seoul, Korea	Nov 2015 - Present June 2014 2013 – 2014 2011 – 2013 2009 – 2010 2008 – 2009
	<i>Software Engineer</i> ; Software developer internship for selected CS undergraduates (20 students per year) <ul style="list-style-type: none"><li>▪ Developed Secure USB filesystem based on extended FAT, Interactive Desktop UI for Windows, and Block system for ARP Spoofing, etc.</li></ul>	