

Minji Kang

Research Intern at Bio & Health Informatics Lab
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Interests	Bioinformatics, Machine Learning, Computer Architecture	
Education	Seoul National University <i>Undergraduate Student</i> <ul style="list-style-type: none">• Bachelor of Science in Computer Science and Engineering• Total GPA of 4.11 / 4.30 (Summa Cum Laude)	Seoul, Korea Mar. 2015 - Feb. 2019
	Haute Ecole d'Ingénierie et de Gestion du Canton de Vaud <i>Exchange Student of Summer University, Computer Science and Communication Systems</i>	Vaud, Switzerland Aug. 2018
Research Experience	Bio & Health Informatics Lab Seoul National University <i>Research Intern (Advisor: Prof. Sun Kim)</i>	Seoul, Korea Jan. 2019 - Present
	Computer Architecture & Embedded Systems Lab Seoul National University <i>Research Intern (Advisor: Prof. Jihong Kim)</i> <ul style="list-style-type: none">• Led project on detection of encrypted data using CNN for ransomware defense, gave poster presentation at Korea Computer Congress 2018• Led project on file-fragment type identification based on Apriori algorithm and multilayer perceptron• Participated in project on low-overhead Ransomware-proof SSD	Seoul, Korea Jul. 2017 - Dec. 2018
Publications	<u>Minji Kang</u> , Jonghoon Won, Jisung Park, and Jihong Kim. A CNN-Based Encrypted Data Detection Technique for Ransomware Defense. In <i>KIISE Transactions on Computing Practices</i> , 2019	
	Invited Paper	
	Jisung Park, Youngdon Jung, Jonghoon Won, <u>Minji Kang</u> , Sungjin Lee, and Jihong Kim. RansomBlocker: a Low-Overhead Ransomware-Proof SSD. In <i>Proceeding of the 56th Design Automation Conference (DAC)</i> , 2019	
	Jonghoon Won*, <u>Minji Kang</u> *, Jisung Park, and Jihong Kim. File-Fragment Type Identification using Selected N-grams by Apriori Algorithm. In <i>Proceeding of the 2018 Korea Software Congress</i> , 2018 [pdf] *: co-first author	
	<u>Minji Kang</u> *, Jonghoon Won*, Jisung Park, and Jihong Kim. A Deep Learning-Based Encrypted Data Detection Technique for Ransomware Defense. In <i>Proceeding of the 2018 Korea Computer Congress</i> , 2018 [pdf] *: co-first author	
	Presentation Award	

Honors and Awards	Best Undergraduate Thesis Award		Feb. 2019
	Dept. of Computer Science and Engineering, Seoul National University		
	Presentation Award		Aug. 2018
	Korean Institute of Information Scientists and Engineers		
	The National Scholarship for Science and Engineering		2017 - 2018
	Korea Student Aid Foundation		
	Eminence Scholarship		2016
	Seoul National University		
	Hanseong Nobel Scholarship		2014
	Hanseong Sonjaehan Scholarships Foundation		
Teaching	Winter Coding Camp , Codewings		Seoul, Korea
	<i>Mentor</i>		Jan. 2018
	<ul style="list-style-type: none"> • Taught Python to elementary school students for 2-day camp • Helped students develop AI car game player with their own creative strategy 		
	Computer Architecture , Seoul National University		Seoul, Korea
	<i>Developer of Lab Assignments</i>		Jul. 2017 - Aug. 2017
	<ul style="list-style-type: none"> • Updated course material from Y86 to Y86-64 • Developed lab assignments to implement Y86-64 processor in Bluespec System Verilog (BSV) 		
Skills	Software languages	Python, R, C/C++, JAVA, OCaml, LaTeX, Assembly Language	
	Hardware languages	Verilog, Bluespec System Verilog (BSV)	
	Machine Learning	Tensorflow, Caffe, PyTorch	
	Web Development	HTML, CSS, React, Django, Angular	
Language Proficiency	Fluent in English and Native in Korean		
	<ul style="list-style-type: none"> • New GRE: Verbal (155, 69%), Quantitative (170, 96%), Writing (4.0, 59%) • IBT TOEFL: 113 (Reading: 30, Listening: 30, Speaking: 23, Writing: 30) 		