

# Junhyug Noh

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EDUCATION	<b>Seoul National University</b> , Seoul, Korea	Mar 2015 – Feb 2020 (expected)
	<ul style="list-style-type: none"><li>▪ Ph.D. in Computer Science and Engineering</li><li>▪ Thesis: Improving Object Detection in Hard Conditions of Scale, Occlusion and Label</li><li>▪ Advisor: Prof. Gunhee Kim</li></ul>	
	<b>Seoul National University</b> , Seoul, Korea	Mar 2013 – Feb 2015
	<ul style="list-style-type: none"><li>▪ M.S. in Computer Science and Engineering</li><li>▪ Thesis: Machine Learning Models and Missing Data Imputation Methods in Predicting the Progression of IgA Nephropathy</li><li>▪ Advisor: Prof. Robert Ian McKay</li><li>▪ Graduated with 1st rank (out of 219) in College of Engineering</li></ul>	
	<b>Indiana University</b> , Bloomington, Indiana, USA	Aug 2008 – Jan 2009
RESEARCH EXPERIENCE	<ul style="list-style-type: none"><li>▪ Intensive English Program (IEP)</li></ul>	
	<b>Seoul National University</b> , Seoul, Korea	Mar 2005 – Feb 2013
	<ul style="list-style-type: none"><li>▪ B.S. in Computer Science and Engineering</li><li>▪ B.S. in Statistics (Double Major)</li><li>▪ Thesis: Prediction of Customer's Follow-on Purchase using Ensemble Methods</li></ul>	
	<b>Vision and Learning Lab</b> , Seoul National University	Mar 2015 – Current
	<ul style="list-style-type: none"><li>▪ Graduate Research Assistant<ul style="list-style-type: none"><li>• Supervisor: Prof. Gunhee Kim</li><li>• Projects: Computer Vision (Object Detection, Semantic Segmentation, etc.), Medical AI</li></ul></li></ul>	
PUBLICATIONS	<b>Medical Research Center for Innovation</b> , Seoul National University Hospital	Jan 2016 – Aug 2016
	<ul style="list-style-type: none"><li>▪ Visiting Researcher<ul style="list-style-type: none"><li>• Supervisor: Prof. Yon Su Kim</li><li>• Projects: Medical AI</li></ul></li></ul>	
	<b>Structural Complexity Lab</b> , Seoul National University	Mar 2013 – Feb 2015
	<ul style="list-style-type: none"><li>▪ Graduate Research Assistant<ul style="list-style-type: none"><li>• Supervisor: Prof. Robert Ian McKay</li><li>• Projects: Genetic Algorithm, Medical AI</li></ul></li></ul>	
	<p>[9] <b>Junhyug Noh</b>, Wonho Bae, Wonhee Lee, Jinhwan Seo and Gunhee Kim, “Better to Follow, Follow to Be Better: Towards Precise Supervision of Feature Super-Resolution for Small Object Detection,” in <i>IEEE International Conference on Computer Vision (ICCV 2019)</i>, Seoul, Korea, Oct 2019.</p> <p>[8] Kangil Kim, Dong-Kyun Kim, <b>Junhyug Noh</b>, and Minhyeok Kim, “Stable Forecasting of Environmental Time Series via Long Short Term Memory Recurrent Neural Network,” <i>IEEE Access</i>, vol. 6, no. 1, pp. 75216–75228, Dec 2018. (SCI)</p> <p>[7] Kangil Kim, <b>Junhyug Noh</b>, Dong-Kyun Kim, and Minhyeok Kim, “Conflict Relaxation of Activation-Based Regularization for Neural Network,” <i>IEEE Access</i>, vol. 6, no. 1, pp. 52510–52518, Dec 2018. (SCI)</p> <p>[6] <b>Junhyug Noh</b>, Soochan Lee, Beomsu Kim, and Gunhee Kim, “Improving Occlusion and Hard Negative Handling for Single-Stage Pedestrian Detectors,” in <i>IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018)</i>, Salt Lake City, Utah, USA, Jun 2018.</p> <p>[5] <b>Junhyug Noh*</b>, Kyung Don Yoo*, Hajeong Lee, Dong Ki Kim, Chun Soo Lim, Young-Hoon Kim, Jung Pyo Lee, Gunhee Kim, and Yon Su Kim, “A Machine Learning Approach Using Survival Statistics to Predict Graft Survival in Kidney Transplant Recipients: A Multicenter Cohort Study,” <i>Nature Scientific Reports</i>, vol. 7, no. 1, pp. 8904, Aug 2017. (SCI, *Equal contribution)</p>	

- [4] Kyung Don Yoo, Clara Tammy Kim, Myoung-Hee Kim, **Junhyug Noh**, Gunhee Kim, Ho Kim, Jung Nam An, Jae Yoon Park, Hyunjeong Cho, Kyoung Hoon Kim, Hyunwook Kim, Dong-Ryeol Ryu, Dong Ki Kim, Chun Soo Lim, Yon Su Kim, and Jung Pyo Lee, “Superior Outcomes of Kidney Transplantation Compared with Dialysis,” *Medicine*, vol. 95, no. 33, e4352, Aug 2016. (SCI)
- [3] **Junhyug Noh**, Dharani Punithan, Hajeong Lee, Jung Pyo Lee, Yon Su Kim, Dong Ki Kim, and Robert Ian McKay, “Machine Learning Models and Statistical Measures for Predicting the Progression of IgA Nephropathy,” *International Journal of Software Engineering and Knowledge Engineering*, vol. 25, no. 5, pp. 829–849, Jun 2015. (SCIE)
- [2] **Junhyug Noh**, Dharani Punithan, Hajeong Lee, Jung Pyo Lee, Yon Su Kim, Dong Ki Kim, and Robert Ian McKay, “Predicting the Progression of IgA Nephropathy using Machine Learning Methods,” in *International Conference on Bio-inspired Information and Communications Technologies (BICT 2014)*, Boston, Massachusetts, USA, Dec 2014. (Oral)
- [1] Wonhee Choe, Hyo-Sun Chun, **Junhyug Noh**, Seong-Deok Lee, and Byoung-Tak Zhang, “Estimating Multiple Evoked Emotions from Videos,” in *Annual Meeting of the Cognitive Science Society (CogSci 2013)*, Berlin, Germany, Aug 2013.

<b>AWARDS &amp; SCHOLARSHIPS</b>	<b>Kakao Travel Grants</b>	Dec 2019
	<ul style="list-style-type: none"> <li>Selected for a research supporting program for attending AAAI 2020.</li> </ul>	
	<b>Naver Ph.D. Fellowship Award</b>	Nov 2018
	<b>Excellent Award of Degree Thesis</b>	Feb 2015
	<ul style="list-style-type: none"> <li>Selected as the best master’s thesis by Department of Computer Science and Engineering, Seoul National University.</li> </ul>	
<b>WORK EXPERIENCE</b>	<b>National Scholarship for Science and Engineering</b>	Mar 2005 – Jun 2011
	<ul style="list-style-type: none"> <li>Funded full-tuition scholarship with stipend for undergraduate studies by Korea Student Aid Foundation (KOSAF).</li> </ul>	
	<b>Kakao Mobility Corp.</b> Pangyo, Korea	Jun 2018 – Aug 2018
	<ul style="list-style-type: none"> <li>Research Intern <ul style="list-style-type: none"> <li>Developed a number plate detection and recognition model.</li> </ul> </li> </ul>	
	<b>Rolling Heads Inc.</b> , Seoul, Korea	Feb 2013 – Mar 2014
<b>TEACHING EXPERIENCE</b>	<ul style="list-style-type: none"> <li>Technical Advisor <ul style="list-style-type: none"> <li>Developed a matching algorithm of social dating application using genetic algorithm.</li> </ul> </li> </ul>	
	<b>Teaching Assistant and Guest Lecturer</b> , Seoul National University	Mar 2013 – Dec 2016
	<ul style="list-style-type: none"> <li>M1522.001000 Computer Vision (Instructor: Gunhee Kim)</li> <li>4190.773 Probabilistic Graphical Models (Instructor: Gunhee Kim)</li> <li>4190.429 Image Processing (Instructor: Gunhee Kim)</li> <li>4190.680 Knowledge Representation and Reasoning (Instructor: Robert Ian McKay)</li> <li>4190.569 Technical Writing for Computer Engineers (Instructor: Robert Ian McKay)</li> <li>4190.425 Advanced Artificial Intelligence (Instructor: Robert Ian McKay)</li> <li>4190.101 Discrete Mathematics (Instructor: Robert Ian McKay)</li> </ul>	
	<b>Instructor</b> , SNU/SK Big Data Academy	Jun 2016 – Sep 2017
	<ul style="list-style-type: none"> <li>Conducted courses in deep learning.</li> <li>Topics: TensorFlow, Convolutional Neural Networks, Object Detction, etc.</li> </ul>	
<b>PROFESSIONAL ACTIVITIES</b>	<b>Mentor</b> , Samsung Convergence Software Course (SCSC)	Aug 2015 – Jun 2016
	<ul style="list-style-type: none"> <li>Worked as a mentor to support undergraduate students taking CSE major courses.</li> </ul>	
	<b>Reviewer</b>	
	<ul style="list-style-type: none"> <li>International Journal of Computer Vision (IJCV)</li> </ul>	
	<b>Military Service</b> , Chungbuk, Korea	Jul 2006 – Jul 2008
<b>OTHER EXPERIENCE</b>		

- Sergeant
  - Belonged to 602nd Battalion, 2nd Aviation Brigade, Army Aviation Operations Command.

*[Last update: 24 Dec 2019]*