Kyuwook Chai

Graduate School of Data Science, Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul, South Korea, 08826
kwchai@snu.ac.kr — www.kyuwookchai.com

RESEARCH INTERESTS

Data integration, data driven decision making, decision making under uncertainty, reinforcement learning & bandits, machine learning & deep learning, technology & innovation

EDUCATION

Seoul National University, *Seoul, South Korea* — Mar 2020 - Present
M.S. student in Data Science
Advisor: Sang Kyun Cha
Student vice-president during Mar 2020- Feb 2021

Seoul National University, *Seoul, South Korea* — 2012
B.S in Physic & Statistics (Double Major)
Cum Laude (Department Rank: 2/23)

RESEARCH & PROJECTS

Reinforcement Learning & Bandits

Taehyun Hwang, **Kyuwook Chai**, Min-hwan Oh. Combinatorial Neural Bandits, *ArXiv:–.–*, 2021.

Kyuwook Chai, Jaewon Chang, Jeahwan Lim, Taehyun Hwang, Jinwon Park. A Survey on Contextual Bandits, *Final Report for Special Topics in Data Science(Reinforcement Learning) (M3239.002300)*, 2020.

Deep Learning

Kyuwook Chai. Seoul Air Quality Prediction, *Project for Master Qualifying Exam*, 2021.
Awarded as Top 3 Presentations

Steven Song, Sungboo Yoon, **Kyuwook Chai**. Meta-GAN: Mobile Adaptaion of Few-Shot Generative Adversarial Networks, *Final Project for Machine Learning for Visual Understanding (M3224.000100)*, 2021.

Keondo Park, Wonyoung Jang, Woochul Lee, Kisung Nam, Kihong Seong, **Kyuwook Chai**, Wen-Syan Li. Real-time Mask Detection on Google Edge TPU, *ArXiv:2010.04427*, 2020.

TEACHING EXPERIENCE

Seoul National University, *Seoul, South Korea*
Teaching Assistant

Big Data, AI, and Innovation IV (SNU Data Science Seminar)	Fall 2021
Big Data, AI, and Innovation III (SNU Data Science Seminar)	Spring 2021
Data Science Bootcamp–Bigdata	Winter 2021
Data Science Bootcamp–Math for Data Science	Winter 2021

GRANTS, AWARDS & SCHOLARSHIPS

Department Scholarship — Fall 2021
Graduate School of Data Science, Seoul National University

National Science and Engineering Undergraduate Scholarship — 2006 - 2011
Korea Student Aid Foundation (KOSAF)
Full-tuition for eight semesters of undergraduate study.

PROGRAMMING & SKILLS

Language: Python, R, C, Prolog, SQL, Cypher, Javascript, HTML, CSS
Tools: TensorFlow, Torch, AWS, Neo4j, Firebase

MEMBERSHIP

The Korean Patent Attorneys Association (KPPA)
The Korean Statistical Society (KSS)

EMPLOYMENTS

Haean Patent & Law Firm, *Seoul, South Korea*   2019 - Present
Patent Attorney, Partner
Patent strategy consulting for small and medium-sized enterprises. Technology valuation reports for credit rating agencies. Government projects for protecting Korean IP in foreign countries.

Daram Intellectual Property Law, *Seoul, South Korea*   2018 - 2019
Patent Attorney
Patent prosecution. Technology reports for research institutes.

FirstLaw P.C., *Seoul, South Korea*   2015 - 2016
Patent Attorney, Associate
Patent prosecution for Korean and Japanese clients applying to the US or Europe. Design rights prosecution and litigation.

YOU ME Patent & Law Firm, *Seoul, South Korea*   2014 - 2015
Patent Attorney, Associate
Trademark investigation and prosecution. Domain name dispute resolution. Design rights prosecution.

OTHER EXPERIENCE

Aircolor (Startup), *Seoul, South Korea*   2016 - 2018
Founder. Worldwide air quality monitoring application.

Preparation for the Korean Patent Bar Examination, *Seoul, South Korea*   2012 - 2013
1st Qualifying Exam: Civil Law, Industrial Property Law, Natural Science
2st Qualifying Exam: Civil Procedure Law, Patent Law, Trademark Law, Electromagnetism

26th Mechanized Infantry Division of ROK, *Yangju, South Korea*   2009 - 2011
Military Service as an Administrative Specialist