

Kyuwook Chai

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EDUCATION

Seoul National University

B.S. in Physics & Statistics (Double Major)

Seoul, South Korea

Aug. 2012

- *Cum Laude*
- Ranked No. 2 among 23 students in dept.

Seoul National University

Enrollment in Integrated MA/Ph.D. Course, Physics & Statistics

Seoul, South Korea

Feb. 2014

- GPA: 3.7 / 4.3
- Attended one semester before deciding to pursue professional career as a patent attorney.

RESEARCH EXPERIENCE

Seoul National University

Advisor: Soo Jong Rey and Jounghun Lee

Seoul, South Korea

Mar. 2012 - Jun. 2012

- Formulated the relation between the sum of the neutrino masses and z_{nr} , the redshift when neutrinos became non-relativistic.
- Calculated the sum of neutrino masses within a reasonable order of magnitude using parameters obtained from the Wilkinson Microwave Anisotropy Probe (WMAP) observations.

Statistical Physics Lab, Seoul National University

Advisor: Byungnam Kahng

Seoul, South Korea

Jun. 2009 - Aug. 2009

- Analyzed the network structure of the National Center for Biotechnology Information (NCBI) taxonomy dataset using Python and R.
- Discovered the scale-free property of the network by obtaining the probability distribution of the nodes with respect to the links, and fitting a linear model to the log-log plot of the distribution.
- Concluded that the dataset is a disassortative network by means of measuring k_{nn} , the average of the number of links of neighboring nodes to a node with a number of links k .

PROFESSIONAL EXPERIENCE

Daram Intellectual Property Law

Patent Attorney, Partner

Seoul, South Korea

Oct. 2018 - Present

- With a partnership with Girim Patent Law Firm, secured a fund equivalent to 55,000 USD from the Korean Intellectual Property Office (KIPO), and conducted a project in setting strategies to acquire optimized intellectual properties of Korea-based companies and start-ups.
- Consolidated patent database and consulting materials for start-up companies.

Aircolor Inc.

Project Manager

Seoul, South Korea

Jan. 2018 - Present

- In October 2017, won a funding equivalent to 7,000 USD from Creative Factory of Seoul National University, for boosting start-up project.

- In October 2018, successfully launched a mobile application built in Ionic Framework, Aircolor, displaying worldwide air quality information and forecasts using World Air Quality Index (WAQI) API.
- Linked mobile application front-end with server side, Firebase Cloud Functions and Cron-job.org, to allow mobile application users receive push notifications of air quality information with respect to selected location and time.
- Designed AirDiary, an algorithm to monitor each user's air pollution sensitivity level, to send the sensitivity level information from each user end to Firebase Realtime Database, and to display each user's cumulated sensitivity level information on their mobile application.

FirstLaw P.C.

Patent Attorney, Associate

Seoul, South Korea

May 2015 - Mar. 2016

- Assisted Tokyo Electron, Panasonic, KAIST, and other Japanese and Korean clients in expanding their semiconductor or electronic device patents to the US or Europe.
- Improved the design patent registration rate of Microsoft and 3M in Korea, and provided them with legal advice regarding difference between the Korean Design Protection Act and the United States Patent Law.
- On behalf of 3M, analyzed prior earplug designs, persuaded the Korean Patent Court to admit the creativity of 3M's new earplug design based on the analysis, and achieved exclusive rights for their earplug patent design in Korea (Patent Court Case No. 2015heo5265).

YOU ME Patent & Law Firm

Patent Attorney, Associate

Seoul, South Korea

Mar. 2014 - Feb. 2015

- Defended the rejection reason issued by Korean Intellectual Property Office of Dyson's bladeless fan, thereby helping Dyson obtain exclusive rights for their bladeless fan design in Korea.
- Prevented brand dilution of Moncler in Korea by closing a website having domain name "www.moncler.or.kr", regularly reporting counterfeit goods, and investigating parallel importers.
- Advised Samsung in international trademark use or filing trademark applications in foreign countries by searching and analyzing international trademark data using SAEGIS (a worldwide trademark data searching system).

TEACHING EXPERIENCE

MPL(MSol-Plasma) Educational Institute / Plasma Educational Institute

Teacher

Seoul, South Korea

Jan. 2017 - Oct. 2017

- Led an advanced physics class for middle school students, leading to successful matriculation of 10+ students at reputed science magnet high schools, including Korea Science Academy of KAIST.
- Coached 100+ students preparing the 2017 Korea Middle School Physics Contest (former Korea Middle School Physics Olympiad).
- Monitored students' test scores and counseled with their parents on their academic performance.

Tutoring / Mentoring Experience as an Undergraduate

Mar.2006 - Aug. 2009

- Tutored statistics for a graduate student of Seoul National University College of Pharmacy, teaching up to χ^2 , t, and F distribution
- Designed, prepared, and supervised an egg-drop experiment for middle school students in Buan, a rural area of South Korea, as a volunteer activity organized by Seoul National University.
- Coached teenage students in math and science, guiding one student to matriculate at Sungkyunkwan University (SKKU).

ADDITIONAL EXPERIENCE / TRAINING PERIOD

Korea Patent Attorneys Association

Patent Attorney Training Program

Seoul, South Korea

Dec. 2013 - Feb. 2014

- Cultivated patent and trademark practice experience through programs provided by senior patent attorneys.

- Improved understanding in the intellectual property examination procedure by visiting the Korean Intellectual Property Office and interviewing intellectual property examiners.
- Experienced how to use World Intellectual Property Organization (WIPO) international intellectual property database.

Preparation period for the Korean Patent Bar Examination

Jun. 2012 - Jul. 2013

- **1st Qualifying Examination** (i) Date: Feb. 23, 2013 (ii) Subjects: Civil Law, Industrial Property Law, and Natural Science (Physics, Chemistry, Biology, and Earth Science) (iii) Average Score / Cut-off Score: 78.3 / 72.50 (iv) Final Status: **Qualified**
- **2nd Qualifying Examination** (i) Date: Jul. 27-28, 2013 (ii) Subjects: Civil Procedure Law, Patent Law, Trademark Law, and Electromagnetism (one subject selected from nineteen science or engineering subjects) (iii) Average Score / Cut-off Score: 60.17 / 56.91; Score of Electromagnetism: 87 (iv) Final Status: **Qualified**

26th Mechanized Infantry Division of ROK

Yangju, South Korea

Military Service as an Administrative Specialist

Oct. 2009 - Jul. 2011

- Completed military service as a sergeant.
- Streamlined the military document delivery system, organized and cataloged classified information of division archive, and managed the 26th Mechanized Infantry Division Museum.
- Served as a secretary of division commander (2 star), assisting official events and managing documents.

Mi-Dong, Art Club of Seoul National University

Seoul, South Korea

Club President

Jul. 2007 - Feb. 2008

- Successfully moved the club from a small room lacking space for art tools and canvases to the largest room provided to clubs.
- Held a bench-painting event as a program of the university campus festival, painting three benches between the Central Library and the University Administration Headquarters.
- Planned and staged an Autumn Art Exhibition displaying 15+ art works of club members in the corridor of the Central Library.

GRANTS, AWARDS & SCHOLARSHIP

Create Factory Support Program

Granting Body: Creative Factory, Seoul National University

Oct. 2017

- Won a funding of 7,000,000 KRW for boosting start-up project Aircolor (smart mask system including a mobile application).

National Science and Engineering Undergraduate Scholarship

Scholarship Body: Korea Student Aid Foundation (KOSAF)

Mar. 2006 – Mar. 2011

- Full-tuition for eight semesters of undergraduate study.
- Additional Scholarship of 500,000 KRW for 7th semester (2009-1), awarded for academic excellence.

PROGRAMING SKILLS

- **Advanced:** R, TypeScript (JavaScript), HTML, CSS
- **Competent:** Python, NoSQL (non-relational database)
- **Others:** C, Java, SAS, SQL (relational database)

PENDING PATENTS

- Kyuwook Chai. Smart Mask System. Korean Patent Application 10-2018-0002746. Filed January 19, 2018.
- Kyuwook Chai. Method of Providing Customized Air Quality Information. Korean Patent Application 10-2018-0069336. Filed June 16, 2018.

PROFESSIONAL QUALIFICATIONS

- Admitted to Korean Patent Bar **Feb. 2014**

MEMBERSHIPS

- Korea Patent Attorneys Association (KPAA)
- The Korean Statistical Society (KSS)

REFERENCE

Dr. Sung Hyun Park, Professor Emeritus
Dept. of Statistics, Seoul National University
+82-2-880-8139
parksh@snu.ac.kr

Ms. Ji-Woo Jeong, Administrative Trademark Judge, Patent & Trademark Attorney
Korean Intellectual Property Trial and Appeal Board
+82-42-481-8317
jwjeong1004@korea.kr

KOREAN INTELLECTUAL PROPERTY OFFICE

CERTIFICATE OF PATENT ATTORNEY

Name : CHAI, Kyuwook

Certification No. : 4725

Date of birth : 1987.05.01



This is to certify that the above mentioned person qualified as a patent attorney on February 17, 2014 in accordance with Article 3 of the Patent Attorney Act.

November 14, 2018

Park Won-joo

Commissioner
Korean Intellectual Property Office
Republic of Korea

Park Won-joo



No. 2018-00964723

Scholarship Certificate

University	Seoul National University	Major	Department of Physics
Name	Kyuwook Chai	ID No.	870501-1074514

This is to certify that the above mentioned person was awarded the following National scholarship by Korean Government as specified.

(KOREA WON)

Term	Scholarship type	Amount
2011-2	National Science and Engineering Undergraduate Scholarship	3,179,000
2009-1	National Science and Engineering Undergraduate Scholarship	3,389,000
2008-2	National Science and Engineering Undergraduate Scholarship	2,889,000
2008-1	National Science and Engineering Undergraduate Scholarship	2,889,000
2007-2	National Science and Engineering Undergraduate Scholarship	2,749,000
2007-1	National Science and Engineering Undergraduate Scholarship	2,749,000
2006-2	National Science and Engineering Undergraduate Scholarship	3,500,000
2006-1	National Science and Engineering Undergraduate Scholarship	3,500,000

DECEMBER 05. 2018

Korea Student Aid Foundation

