MINSEOK JO

EDUCATION

Yonsei University • Seoul, Korea

2015 - 2017

Masters of Science in Electrical and Electronic Engineering

• Advisor: Prof. Daesik Hong

Yonsei University • Seoul, Korea

2009 - 2015

Bachelor of Science in Electrical and Electronic Engineering

• GPA: 3.90/4.3

Experience

Senior Researcher – LG Electronics

Feb 2020 – Present

Seocho-gu, Seoul, Korea

- Development of AI/ML-related Patents for 6G Communication Standards
- Project Management of 6G Research Projects
- Monitoring 3GPP RAN1 Standardization

Trainee – Multicampus

Apr 2019 - Sep 2019

Gangnam-gu, Seoul, Korea

• Vocational Training: Recognized as a potential leader for driving the Fourth Industrial Revolution, my training in AI development through deep learning was fully sponsored by a national grant of \W16 million.

Technology Licensing Officer – Yonsei University

Sep 2018 - Feb 2019

Seodaemun-gu, Seoul, Korea

 Handled the university's patent portfolios, analyzed market and technological trends, and engaged in technology transfer marketing.

${\bf Chief\ Technology\ Officer}-{\bf Sports\ \&\ Kinetics,\ Inspire\ (HaoDoc)}$

Sep 2017 - Aug 2018

Seoul, Korea

• Startup Companies: Technical Strategy & Development Lead, Business Planner

Honors & Awards

Academic Honors:

• Highest Honors (Summa Cum Laude by semester)

Aug 2013

Achieved within the top 1% of the college.

• High Honors (Magna Cum Laude by semester)
Achieved within the top 3% of the college. (3 semesters)

Feb 2011, Feb 2010, Aug 2009

• Honors (Cum Laude by semester)

Achieved within the top 10% of the college. (2 semesters)

Feb 2014, Aug 2010

Selected Recognitions:

• Top Excellence Prize for Public Data Utilization

Jun 2018

Startup Competition of Korea Credit Guarantee Fund

• Best Poster Award (Divisional)

Aug 2012

Recognized by (later) four-star General *Park Jong-jin*, the last Commander of the 1st Field Army Headquarters, ROK Army, in the Campaign Against Verbal Abuse.

• Outstanding Science Youth Award

Apr 2002

Presented by the Minister of Science and Technology.

Recognized for exemplary performance in mathematics and science, as well as exceptional scientific curiosity and creativity.

Scholarships & Fellowships:

• Kwanjeong Educational Foundation Scholarship (4 semesters)

 $Mar\ 2015-Feb\ 2017$

• National Academic Excellence Scholarship (for Science and Engineering) (7 semesters) from Korea Student Aid Foundation

Mar 2009 – Aug 2014

• Brain Korea 21 (BK21) Government Scholarship (2 semesters)

Sep 2015 - Feb 2017

• Yonsei Graduate Fellowship

Mar 2015 – Aug 2015

• Haesung Cultural Foundation Scholarship

 $Sep\ 2014 - Feb\ 2015$

Device and method for generating multi-functional signal in wireless communication system WO 2025/023349 A1 Filed Jul 27, 2023

• Inventors: Minseok Jo, Kaibin Huang, Zhiyan Liu, Sangrim Lee

Device and method for acquiring channel information in wireless communication system WO 2025/023353 A1 Filed Jul 27, 2023

• Inventors: Minseok Jo, Xu Chen, Kaibin Huang, Sangrim Lee

Device and method for online training of multi-modal ${\rm AI/ML}$ model in wireless communication system

WO 2025/018440 A1 Filed Jul 17, 2023

• Inventors: Kyungho Lee, Sangrim Lee, Ikjoo Jung, Minseok Jo

Method for reporting channel state in wireless communication system, and apparatus therefor WO 2024/150853 A1 Filed Jan 12, 2023

• Inventors: Minseok Jo, Sangrim Lee, Bonghoe Kim, Kyungho Lee

Method for transmitting and receiving signals in wireless communication system, and device supporting same

WO 2024/143602 A1 Filed Dec 28, 2022

• Inventors: Yeongjun Kim, Sangrim Lee, Bonghoe Kim, Kyungho Lee, Taesung Lim, Minseok Jo

Apparatus and method for supporting parallel neural network architecture for cumulative CSI feedback in wireless communication system

WO 2024/143573 A1
• Inventors: Minseok Jo, Bonghoe Kim, Kyungho Lee, Sangrim Lee, Yeongjun Kim

Apparatus and method for supporting user grouping of end-to-end precoding system in wireless communication system

WO 2023/113390 A1 Filed Dec 9, 2022

• Inventors: Minseok Jo, Bonghoe Kim, Kijun Jeon, Sangrim Lee

Method for performing channel state report in wireless communication system, and apparatus therefor

WO 2024/122688 A1 Filed Dec 8, 2022

• Inventors: Minseok Jo, Sangrim Lee, Bonghoe Kim, Kyungho Lee, Yeongjun Kim

Device and method for performing online learning supporting variable rates for channel state information in wireless communication system $\frac{1}{2}$

WO 2024/096160 A1 Filed Nov 2, 2022

• Inventors: Minseok Jo, Yeongjun Kim, Sangrim Lee, Kyungho Lee, Bonghoe Kim

Apparatus and method for feeding back channel state information at variable rates in wireless communication system WO 2024/071460~A1 Filed Sep 27, 2022

• Inventors: Minseok Jo, Sangrim Lee, Kyungho Lee, Bonghoe Kim, Ikjoo Jung, Yeongjun Kim

Device and method for performing multi-user precoding in wireless communication system WO 2023/090615 A1 Filed Sep 22, 2022

• Inventors: Minseok Jo, Bonghoe Kim

Apparatus and method for signal transmission in wireless communication system WO 2023/120781 A1 Filed

Filed Dec 24, 2021

Filed Dec 26, 2022

• Inventors: Kyung Ho Lee, Sangrim Lee, Minseok Jo, Yeong Jun Kim, Ikjoo Jung

Method, communication equipment, processing device, and storage medium for updating knowledge for semantic communication in wireless communication system WO 2023/101057 A1 Filed Dec 2, 2021

• Inventors: Ikjoo Jung, Sangrim Lee, Kyung Ho Lee, Tae Hyun Lee, Minseok Jo

Method, transmission device, processing apparatus, and storage medium for transmitting channel state information, and method and reception device for receiving channel state information WO 2023/090474~A1 Filed Nov 17, 2021

• Inventors: Minseok Jo, Sangrim Lee, Ikjoo Jung, Hojae Lee

Method, base station, and processing device for receiving channel state information WO 2023/085460~A1 Filed Nov 11, 2021

• Inventors: Minseok Jo, Sangrim Lee, Bonghoe Kim, Ikjoo Jung, Kyungho Lee

Method and device for supporting semantic communication in wireless communication system WO 2023/068398 A1 Filed Oct 20, 2021

• Inventors: Ikjoo Jung, Sangrim Lee, Kijun Jeon, Taehyun Lee, Minseok Jo

Method for reporting channel state information in wireless communication system, and apparatus therefor

WO 2023/054778 A1 Filed Oct 1, 2021

• Inventors: Minseok Jo, Sangrim Lee, Bonghoe Kim, Ikjoo Jung, Hojae Lee

Method and device for updating parameter for autoencoder-based downlink system

WO 2022/097788 A1

Filed Nov 6, 2020

- $\mathit{Inventors}$: Minseok Jo, Sungjin Kim, Bonghoe Kim, Sangrim Lee, Jaeyong Park

Method and apparatus for performing channel coding by terminal and base station in wireless communication system

WO 2022/045390 A1 Filed Aug 25, 2020

• Inventors: Sungjin Kim, Jong Ku Lee, Myung Hee Lee, Jae Yong Park, Ikjoo Jung, Minseok Jo

Publications

Domain Knowledge-Based Neural Network Architecture for End-to-End Multiuser Precoding in Massive MIMO System

Minseok Jo, Sangrim Lee, Bonghoe Kim, Kyungho Lee, Ikjoo Jung IEEE 97th Vehicular Technology Conference (VTC2023-Spring)

Jun 21, 2023

A Radio Resource Allocation Scheme that Improves Reliability in the LTE-Based V2V Communication

Minseok Jo, Yosub Park, Incheol Hwang, Daesik Hong Submitted to $IEEE\ Access$

Submitted Sep 30, 2017

Reliable Data Transmission for Driving Information of Energy-Harvesting Bicycle

Minseok Jo, Wonsuk Chung, Taehyung Kim, Daesik Hong

The IEIE Summer Conference 2016

June 23, 2016