# Jeongdam Choi

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## **Intended Areas of Specialization**

Philosophy of Mathematics and Logic, Mathematical Logic, Foundations of Mathematics

#### **Broader Interests**

Philosophy of Language, Philosophy of Physics, Philosophical Logic, Type Theory

#### **Education**

## Korea Advanced Institute of Science and Technology (2020-2025, GPA: 4.10/4.3)

Bachelor's Degree: Department of Mathematical Sciences, Double Major in School of Computing

University of Leeds (2022/2023 Semester, Credits: 32.5 ECTS)

Study Abroad: Philosophy, Religion and History of Science

# **Awards and Scholarships**

Summa cum laude (KAIST, 2025)

#### KAIST Presidential Fellowship (KAIST, 2022)

In recognition of their broad and profound academic curiosity, and their ability to channel it through writing that inspires in others an appreciation of deliberation.

Presidential Science Scholarship (President of South Korea, 2020)

#### Talent Award of Korea (Ministry of Education, 2019)

In recognition of their oustanding performance in mathematics and computer science, and their commitment to making learning accessible and enjoyable through social platforms.

# **Experience**

#### Republic of Korea Air Force IT Development & Management Specialist (2024-2026)

In fulfillment of mandatory military service, developed and managed systems including the Physical Fitness Assessment System and the Catering Attendance Survey System.

#### **Assistance in Philosophy of Artificial Intelligence Research** (2025)

Assisted Prof. Dongwoo Kim and Prof. Hyungrae Noh in research on the public's ethico-epistemological attitudes towards artificial intelligence. Authored questionnaires and contributed to research discussions.

# Participation in Prof. Dongwoo Kim's Lab Meetings (2024)

Participated in research discussions with Prof. Dongwoo Kim's graduate students and co-organised regular reading sessions on analytic philosophy and the philosophy of language.

## Exchange Student at Yonsei University (2022, GPA: 4.3/4.3)

Studied analytic philosophy under Prof. Lee Seungjong.

## Internship at PLRG @ KAIST (2022-2023)

Led a study group on programming language theory and program analysis. Organised reading sessions on

key papers in programming language theory. Assisted in the implementation of a static analyser for Javascript.

#### **Activities**

#### Blog on Logic, Mathematics, and Philosophy

Topics range from technical areas—model theory, foundations, topology—to more interpretive subjects, including philosophical expositions and literary translation. (Written in both English & Korean)

# **Computational Sociology Reading Session** (2025)

Participated in reading sessions and graduate seminar discussions led by Prof. June Jeon and Prof. Lanu Kim on topics in computational sociology.

#### **Topics on Logic and Philosophy of Language** (2024)

Independently prepared and delivered a semester-long lecture series. Lecture notes have been bookmarked by over 2,000 users on X (formerly Twitter).

# **Published Books, Essays, and Series**

### How to Read Maths (수학을 읽는 힘) (2025, Woongjin)

An illustrated history of mathematics and its ties to philosophy and science. Recommended by the Ministry of Education for young readers.

#### Lessons from Mathematics '수학이 그렇게 말했다. (2024, Jihak Publishing Co.)

A collection of essays interweaving the intellectual virtues of mathematics with humanistic inquiry.

## Russell: Mathematics, Philosophy, and Lifer러셀 탐구생활, (2023, Donga Science)

A brief biography of Bertrand Russell, along with personal thoughts on the public duty of intellectuals.

#### Alice in Logiclandred 나라의 앨리스, (2022, Donga Science)

An exposition of logical paradoxes and their connection to the foundations of mathematics.

#### A Subversive Guide to Maths(발칙한 수학책) (2021, Whalebooks)

An exposition of pure mathematics, highlighting the logical structure of mathematical language and the intricate network of concepts it builds. Named best-selling science book of the year.

#### **Writing Samples**

Does P-NP equivalence threaten the well-definedness of Determinism? (2025, in preparation)

Implications of Kripke-Wittgenstein Paradox for Mechanistic Theories of Mind (2025, in preparation)

# **Semantic Criticism of Multiple Realisability** (2023)

Argues that the scope of Fodor's multiple realizability argument is more limited than he claims. Drawing on the use theory of meaning, the essay contends that many purported cases of multiple realisability are in fact pseudo-natural kinds. Concludes that multiple realisability highlights the need for refined kinds, but does not preclude the effectiveness of reduction.

# Remarks on the Naturalistic Account of Wittgensteinian Philosophy of Mathematics (2022)

Summarises Lee Seungjong's interpretation of Wittgenstein's philosophy of mathematics, focusing on the naturalisation of logic, contradictions, and mathematics. Offers commentary on logic and contradictions through discussions of modality and Thompson's lamp. Criticises Lee's discussion on mathematics by identifying a fallacy in his use of non-Euclidean geometry to exemplify the alleged irreconcilability of distinct mathematical theories.

# **Miscellaneous Skills**

## Language

Native in Korean, fluent in English (C1-C2), acquainted with Japanese (JLPT N2) and German (B1).

## **Web Development**

Capable of fullstack development, including Java, Spring, SQL, Javascript, React, HTML/CSS.

## **Humanities and Arts**

Capable of graphic design: handled all illustrations for my published books. Trained in classical piano. Frequent engagement with literary writing.