#### **Abstract**

# A Study on Copyrightability of Music Composed by Artificial Intelligence

Lim, Hyoseong\*

Today's Artificial intelligence (AI) technology is expanding rapidly into the arts and creative fields that have evolved to be beyond the industry and confident of being a human-specific domain. If the artificial intelligence similar to human beings(human level machine intelligence), which is different from the present one, is developed through future technological development, it may encroach on human creative area with high level of creative ability and rapid mass production. As the ability of artificial intelligence improves, there arises a question about whether it is possible to apply the copyright law to artificial intelligence to promote human creative activities and protect their rights. In this article, we will look at music creation only.

I examine the historical background that music is protected by copyright law and the characteristics of current representative artificial intelligence composition programs (Iamus, Jukedeck, Flow machines, etc.), and analyze the characteristics of the musical creations by dividing them into creative elements and non-creative elements. Based on this, (IV), I examine issues such as recognition of copyrightability of musical creations using artificial intelligence and copyright grant with the purpose of copyright law. In the case of strong artificial intelligence, it is also necessary to discuss the issue of rights attribution of musical works composed by artificial intelligence. The protection of musical creations composed by artificial intelligence should be considered together with the purpose of copyright law and policy judgment.

<sup>\*</sup> Standing composer, Artsehcro Orchestr a / Editor in Chief, Sun-Yul Inc.

# Keywords

Artificial Intelligence, AI Creative Work, AI Music Composition, Jukedeck, Magenta Project, Algorithm, Music work, Copyrightability, Originality, Authorship

### 참고문헌

## 1. 단행본

박성호, 『저작권법』, 박영사(2014).

삼호뮤직 편집부, 『파퓰러음악용어사전 & 클래식음악용어사전』, 삼호뮤직(2002).

송성수, 『세상을 바꾼 발명과 혁신』, 생각의힘(2018).

오승종, 『저작권법(제4판 전면개정판)』, 박영사(2016).

이규홍·김기영·장현진·김병국 공저, 『저작권과 침해』, 육법사(2016).

임원선, 『실무자를 위한 저작권법(제4판)』, 한국저작권위원회(2014).

정상조·차상균·이원복·남희섭, 『기술 환경 변화에 대응하기 위한 저작권 이슈 연구』, 한국 저작권위원회(2017).

Frith, Simon, Lee Marshall, *Music and Copyright 2nd ed.*, Routledge New York(2004). The Compendium of U.S. Copyright Office Practices, 3rd Edition, 313.2

#### 2. 논문

- 김진호, "컴퓨터의 지원을 받는 작곡, 그 역사와 이론", 『음악과 민족』, 제35호(2008), 285-310, 285-286쪽.
- 김현경, "저작권 귀속법리와 인공지능 창작물에 대한 고찰", 『성균관법학』, Vol.29 1(2017), 331-374, 350쪽.
- 김혜성, "인공지능(AI)을 이용해 작곡한 음악저작물의 저작권 보호", 『LAW & TECHNOLOGY』, 제4권 제2호(2018), 20-32, 20쪽.
- 노영해, "알고리즘 컴퓨터 음악의 역사와 유형", 『음악연구』(한국음악학회), Vol. 32(2004), 137-160, 148쪽.
- 박성호, "음악저작권의 생성과 발전에 관한 역사적 고찰", 『법학논총』, 제28권 제3호(2011), 33-56, 42쪽.