

A Dress that Changes Color Based on Tweets!?

In May 2016, a fashion event was held at the Metropolitan Museum of Art in New York. The event featured an eye-catching exhibit of a "cognitive dress." The dress was decorated with flowers, in each of which was embedded an LED light. An AI analyzed comments made on Twitter by museum visitors about the dress, and lit up the LEDs based on the linguistic content of the tweets using the concept of color psychology



Students talk with a robot they have programmed

The AI used was the IBM*1-developed system known as Watson*2. The fashion designers behind the cognitive dress also used Watson when creating it. The designers taught Watson about colors using photographs of their own past designs and other such information, and received suggestions from Watson on what colors could be used to express different human emotions. Watson also made recommendations about what materials to use from a database containing information on approximately 40,000 materials.

This type of AI support is being used in an increasing large variety of fields. In sports, video footage of players can be analyzed by an AI, and the resulting analysis can be used to adjust a team's tactics in real time. Similarly, shogi software

is another type of AI that is transforming the shogi world by suggesting strategies that were previously unpopular among professional players, but when used, allow the player to win. Yoshiharu Habu and Sota Fujii both utilize shogi software.

While fashion designers, athletes and shogi players may be supported by AIs, the final decision is always left to the human in charge. This shows that people have mastered the use of AIs. AIs are tools that expand human abilities in the same way that the automobile increased our mobility. "Data science" is a field that harnesses the processing power of AIs to organize and analyze large amounts of digital data to find trends and patterns difficult for humans to recognize.

Seijo University has offered its students data science courses for the past four years. The university also established a dedicated institution for data science with the Education and Research Center for Data-driven Social Sciences & Humanities. Students are given the opportunity to experience using an AI, a highly useful tool in data science, through using a Watson system. People with data science skills are now sought after in all fields covered by the Seijo University curriculum, and Seijo students are finding the skills they learn in data science classes are helping them find jobs. As the demand for data scientists increases in the future, that trend will surely grow stronger.

*1 International Business Machines Corporation *2 An IBM brand of enterprise-ready AI services, applications, and tooling.

辻智特任教授（成城大学データサイエンス教育研究センター）

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森由美学園長補佐（学校法人成城学園）

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