

KIT Creates “AI with MATLAB” Course as a Schoolwide Requirement

Kanazawa Institute of Technology

Kanazawa Institute of Technology (KIT) developed an AI fundamentals course that includes programming exercises on image classification using MATLAB®. This course will be required for all freshmen, filling the global need to grow students with AI skill set. More than 1500 students will take this course every year.

KIT and MathWorks worked together to develop some programming exercises on image classification using convolutional neural networks. Using an original visualization app built with App Designer, students train a neural network from their own handwritten letters. They also learn practical techniques for improving accuracy.

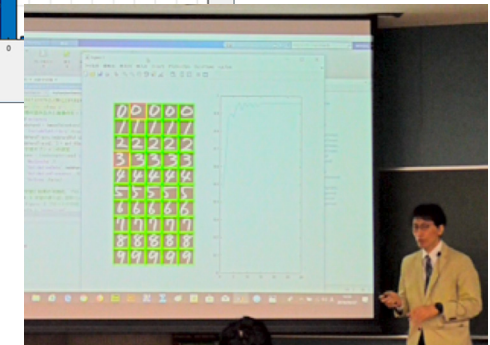
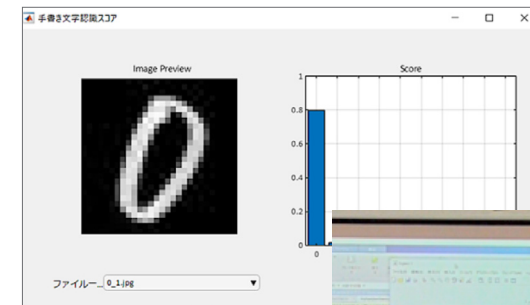
KIT adopted a Campus-Wide License for MATLAB and Simulink® in 2015, before developing this course. With the license, all university staff and students can install and use the software anywhere, anytime.

Advantages of using MATLAB:

- Unified programming environment for 1500 students
- Automated training data creation with image processing capabilities
- Intuitive app that helps students understand deep learning
- Accessible and customizable code for students to encourage self-learning



We decided to use MATLAB for the schoolwide AI course because of its **intuitive UI** and **extensive libraries**. The app helps even freshmen to understand the essence of AI. They can also gain in-depth knowledge, because **the code is easily customizable**.



» Download sample code for the image classification exercises

» Explore deep learning

» Explore resources for educators

» Learn about the Campus-Wide License