# Robots, Autonomous Vehicles and Deep Learning 



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## Application of computer vision to endoscope and SEM images using neural network learning

In the computer vision and machine learning fields, image recognition and its application technologies are more and more 1 becoming popular in recent years. In this talk, application of computer vision to medical endoscope and SEM images using neural network is introduced for the approaches we have developed in recent years. Endoscope images are used for the supporting system of the medical diagnosis including 3D shape recovery and pattern classifications, where automatic polyp detection and classification of benign or malignant are investigated based on the recent machine learning approaches including deep learning, while SEM images are used to recover 3D shape for the industrial applications using neural network.

## Biography

Yuji Iwahori has completed his BSc degree from Department of Computer Science, Nagoya Institute of Technology, MS and PhD degree from the Department of Electrical and Electronics, Tokyo Institute of Technology in 1985 and 1988, respectively. He had joined Nagoya Institute of Technology in 1988 and then became a Professor in 2002. He has joined Chubu University as a Professor since 2004 with experience of the Department Head of Computer Science. In the meanwhile, he has been a Visiting Researcher of the University of British Columbia Computer Science, Canada. He has also been a Research Collaborator with Indian Institute of Technology, Guwahati. His research interests include computer vision and application of machine learning. He has published over 220 scientific papers of journals and international conferences.

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