

Division of Electrical Engineering and Computer Science	Research field	Video Information Processing	Lab. ID EC27
Laboratory web site	<a href="http://vip16.ec.t.kanazawa-u.ac.jp/">http://vip16.ec.t.kanazawa-u.ac.jp/</a>		
Research subjects			
<p>Recently, image and video processing technology has been applied in various fields such as medical appliances, astronomical observation, and traffic system. For example, moving picture coding technology for efficient transmission and storing of video signal having a large amount of information is mentioned as an example. We research an image and video processing algorithm for the purpose of improvement of the efficiency and the functionality as well as invention of new technology.</p>			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
<p>Student of the Master's level section participates a regular progress meeting once a week and discusses with staff and students about each research. The research theme is decided through an interview after entrance into college immediately. Because our subject is development of algorithm, most experiments are computer simulation.</p>			
Daily life in the laboratory, etc.			
<p>The student can use a personal computer in the laboratory exclusively. There are server computers in the laboratory, and you can perform a advanced computer simulation. (Staff)  We have a gethering party of laboratory members twice in a year. (M1)  We have a trip together every year. (M1)</p>			
Message or comments by the laboratory faculty staffs			
<p>Members of the laboratory have clear goal and realistic plan for achieving it, and we have conducted research actively. A framework for the sudy will materialize with the trusting relationship of knowledge and daily lives between members.  Students of entrance into graduate school in the laboratory are 1-3 people every year, and they often find a job to a manufacture in Japan after graduation.</p>			
Recent Master theses in these 3 years (+ more if appropriate)			
year.month	Thesis title (including English translation of Japanese thesis title)		
2017.3	Improvement of Image Quality and Processing Speed Using Tree Structure Dictionary for Sparse Representation		
2017.3	Quantification of Columnar Structure from Confocal Microscopy Image by Deep Learning		
2017.3	Improvement of Attack Resistance in Digital Watermarked Video Searching Based on Keyframe and SLR-LBP		
2017.3	A Moving Object Extraction by Level Set Method Based on Frame Difference and Blur Information		
2015.3	Level Set Method Considering Depth and Edge Information for Moving Object Extraction		
2015.3	Pre-search Algorithm Based on the Pixel Statistics for Two-stage Search of Digital Watermark Image		
2014.3	Inprovement of Depth Map Estimation from a Single Image Using DFD Method		
2014.3	Image Watermarking Using an Adaptive Selection Method of DFT Coefficient for Embedding		
2013.9	A Study of Ray-space Interpolation Based on Pathwork in Epipolar-plane Image		
2013.3	A Moving Object Extraction by level Set Method Considering Depth Information		
2013.3	Depth Map Estimation Using an Assignment Based on Poisson Equation from a Single Image		
2012.9	Flight Direction Detection of Drosophila for Analysis of Visual Cognitive Function		
Recent Doctoral theses in these 3 years (+ more if appropriate)			
year.month	Thesis title (including English translation of Japanese thesis title)		
Laboratory mail address	IMAMURA, Kousuke <imamura *at* ec.t.kanazawa-u.ac.jp>		