

CV

Kai-Che Jack Liu 劉楷哲

1. Present Job

- **Director** , R&D , Asian Institute of TeleSurgery , Show Chwan Healthcare System
- **Director** , Incubation Center , Show Chwan Healthcare System
- **Deputy General Director** , Ming Shi Co. Ltd. , Show Chwan Healthcare System ,
- **Assistant Professor**
- **Project Management Professional (PMP)**

2. Professional Experience

- **Course Professor** , Advanced Course in GYNECOLOGICAL SURGERY / IRCAD-Taiwan
- **Visiting Scholar** , R&D/IRCAD-France, Strasbourg/France
- **Faculty**, Computational Surgery International NETwork (Cosine)
- **Assistant Manager** , Electronics and Opto-Electronics Laboratories , Industrial Technology Research Institute
- **Patent Committee Member**, Electronics and Opto-Electronics Laboratories , Industrial Technology Research Institute
- **Engineer** , Electronics and Opto-Electronics Laboratories , Industrial Technology Research Institute
- **Visiting Scholar** , School of Electrical and Computer Engineering/Cornell University
- **Visiting Scholar** , Department of Electrical and Computer Engineering /Carnegie Mellon University

3. Education

- **Ph.D.** , Department of Aeronautics and Astronautics , National Cheng Kung University , Taiwan
- **M.S.** , Department of Aeronautics and Astronautics , National Cheng Kung University , Taiwan
- **B.S.** , Department of Aeronautics and Astronautics , National Cheng Kung University , Taiwan

4. Publication

Journal Paper

- Atul Kumar, Yen-Yu Wang, Ching-Jen Wu, Kai-Che Liu, Hurng-Sheng Wu (2013, Dec). Stereoscopic visualization of the laparoscope image using depth information from 3D model. Computer Methods and Programs in Biomedicine. (Accepted). (SCI)
- Jing-Ren Wu, Min-Liang Wang, Kai-Che Liu, Ming-Hsien Hu, Pei-Yuan Lee (2013, Dec). Real-time Advanced Spinal Surgery via Visible Patient Model and Augmented Reality System. Computer Methods and Programs in Biomedicine. (Accepted). (SCI)
- Tung-Ying Lee, Tzu-Shan Chang, Chen-Hao Wei, Shang-Hong Lai, Kai-Che Liu, Hurng-Sheng Wu (2013, Sep). Automatic Distortion Correction of Endoscopic Images Captured With Wide-Angle Zoom Lens. Biomedical Engineering, IEEE Transactions on. (SCI/EI)
- Guo-Shiang Lin, Hsiang-Yun Huang, Wei-Chih Chen, Cheng-Ying Yeh, Kai-Che Liu and Wen-Nung Lie (2012, Nov). STEREOSCOPIC VIDEO CONVERSION SCHEME BASED ON SPATIO-TEMPORAL ANALYSIS OF MPEG VIDEOS. EURASIP Journal on Advances in Signal Processing. (SCI/EI).
- WU Jungle Chi-hsiang, LIN Mao-sheng, WU Hurng-sheng and LIU Jack Kaiche (2012, Sep). Augmented Reality Techniques Assisted Laparoscopic Ureteroureterostomy for Retrocaval Ureter . Chinese Medical Journal. (SCI).
- A. S. Vemuri, C. H. Wu, K. C. Liu, H. S. Wu (2012, May). Deformable 3D Model Architecture for Interactive Augmented Reality in Minimally Invasive Surgery. Surgical Endoscopy. (SCI).

Patent

- US 8,411,932, Example-based two-dimensional to three-dimensional image conversion method, computer readable medium therefor, and system.
- US 8,345,958, Method and system for developing new-view image.
- US 8,218,854, Method for synthesizing image with multi-view images.
- I398158, Method for generating the depth for stereo image
- I387934, Method and system for rendering multi-view image
- I370410, Image processing method for providing depth information
- I348120, Method of synthesizing an image with multi-view images
- I240528, A Method of Image Encryption and Decoding in Digital Signal Processor