

SHIH-CHENG (VINCENT) CHIEN

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EDUCATION

Sep 2004 – Jan 2007	NATIONAL TAIWAN UNIVERSITY <i>Master of Science in Electronics Engineering</i>	Taipei, Taiwan
Sep 2000 – Jul 2004	NATIONAL CHIAO TUNG UNIVERSITY <i>Bachelor of Science in Electronics Engineering</i>	Hsinchu, Taiwan

RESEARCH INTERESTS

- EEG/MEG source localization and connectivity analysis
- Mechanism in attention, learning and memory
- Sensory-motor integration
- Artificial neural networks

ACADEMIC AND WORKING EXPERIENCE

Apr 2010 – Present	INSTITUTE OF STATISTICAL SCIENCE, ACADEMIA SINICA <i>Research Assistant, Functional Neuroimaging Group</i>	Taipei, Taiwan
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- EEG connectivity analysis (using self-developed code and public toolbox such as SIFT, DCM)
- Resting-state EEG analysis (a study on the effect of meditation)
- EEG/MEG Signal analysis integrated with structural MRI for source localization
- Programming for visual EEG/MEG experiments
- Conducting the experiments
- Involved projects (Funding Source: National Science Council, Taiwan)
 - **Informational Synthesis in the Associative Cortex** (2010 – 2011)
Supervised by Michelle Liou, Senior Research Fellow, Institute of Statistical Science, Academia Sinica
 - **Mapping and Localization of EEG/MEG Sources in Real-Life Situation Modeled by Computer Games** (2010)
Supervised by Arthur C. Tsai, Assistant Research Fellow, Institute of Statistical Science, Academia Sinica
 - **Natural Language Processing in Chinese and English: Brain Oscillatory Activity During Recognition, Interpretation and Prediction** (2010)
Supervised by Alexander Savostyanov, Senior Staff Scientist at State Research Institute of Physiology, Siberian Branch of the Russian Academy of Medical Sciences

Mar 2008 – Apr 2010	HTC CORPORATION <i>Hardware Engineer, WM Logic Design Department,</i>	Taipei, Taiwan
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- Camera feature (3A algorithm: Auto focus, Auto exposure, Auto white balance) development on Windows Mobile phone & Android phone
- Development of camera per-module white balance calibration on production line
- Development of camera per-module LSC calibration on production line
- Programming for research purpose on optical and audio element using high precision and high speed laser displacement measuring equipment

TECHNICAL SKILLS

- Platform: Windows, Linux
- Programming Languages: Matlab, C/C++, Java, Assembly, Verilog, VHDL
- Software: EEGLAB, SPM, FreeSurfer, SPSS

PUBLICATIONS

Articles

1. A.C. Tsai, T.P. Jung, V.S.C. Chien, A.N. Savostyanov, S. Makeig, “*Cortical Surface Alignment in Multi-Subject Spatiotemporal Independent EEG Source Imaging*,” *NeuroImage*, 87:297–310, 2014.
2. A.C. Tsai, A.N. Savostyanov, A. Wu, J.P. Evans, V.S.C. Chien, H.H. Yang, D.Y. Yang, and M. Liou, “*Recognizing syntactic errors in Chinese and English sentences: EEG oscillatory activity in Aspergers syndrome*,” *Research in Autism Spectrum Disorders*, 7:889–905, 2013..

Poster

1. V.S.C. Chien, C.S Kuo, A.C. Tsai, M. Liou, P.E. Cheng, "Exploratory Analysis of Brain Connectivity in Short-term Meditation by Using Transfer Entropy," 20th Annual Meeting of the Organization for Human Brain Mapping, 2014 (submitted on January 16, 2014)
2. P.Y. Chen, H.L. Hsieh, V.S.C. Chien, J.D. Lee, Y.L. Chang, W.Y. Tseng, “*Callosal tract density in the gray-white matter junction associates with cortical thickness in normal ageing*,” Society for Neuroscience, 2013
3. P.Y. Chen, V.S.C. Chien, H.L. Hsieh, J.D. Lee, W.Y. Tseng, “*Decomposition of Cortical-cortical Functional Connectivity Using a Functional Data Analysis of Resting-State fMRI*,” Biennial Conference on Resting State Brain Connectivity, 2012
4. Arthur C. Tsai, Alexander N. Savostyanov, Michelle Liou, V.S.C. Chien, Steven Su, Tzyy-Ping Jung and Scott Makeig, “*On Single-trial ERSP Reproducibility across Multiple Subjects/Trials by Semantic Texton Forests*,” Society for Neuroscience, 2010

Master Thesis

1. V.S.C. Chien, “*Dynamically Adjustable Routing Engine Design for Traffic-aware On-Chip Networking Systems*,” National Taiwan University, 2006