

## Curriculum Vitae

### Assistant Professor Dr. Worawat Choensawat

ผู้ช่วยศาสตราจารย์ ดร. วรวัฒน์ เชิญสวัสดิ์



**Position:** Lecturer, School of Science and Technology, Bangkok University

**Working address:** Rama 4 Rd., Klong-Toey, Bangkok 10110, THAILAND

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**Research Interest:** Graphics system for human body movement, Motion capture, Multimedia, Dance notation

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#### Education:

- 2009 – 2012                      **Ph.D. in Engineering**, School of Science and Engineering, Ritsumeikan University, Shiga, Japan.  
*Dissertation: Integrated Dance Body Motion Archiving Using Dance Notation and Motion Capture.*
- 2000 – 2002                      **M.Sc. in Information Science**, King Mongkut's Institute of Technology Ladkrabang (KMIT'L), Bangkok, Thailand.
- 1995 – 1999                      **B.Sc. in Civil Engineering**, King Mongkut's Institute of Technology Ladkrabang (KMIT'L), Bangkok, Thailand.

#### Honor Award:

- 2011                                      Bursary Winners Award from Alliance of Digital Humanities Organisations in 2011 (Digital Humanities 2011 at Stanford University, USA, in the presentation of "A Labanotation Editing Tool for Description and Reproduction of Stylized Traditional Dance Body Motion".

#### Competition:

- 2014                                      2nd place winner in the IEEE CIG2014 Fighting Game AI Competition

#### Grants and Scholarships:

##### **Doctoral Program, Ritsumeikan University**

- 2010                                      Full Tuition scholarship 500,000yen.  
2010                                      CREOTECH Scholarship Program for 2010 (Scholarship Programs for International Student in Doctoral Degree) 250,000yen  
2011                                      Half Tuition scholarship 250,000yen.  
2011                                      CREOTECH Scholarship Program for 2011 (Scholarship Programs for International Student Doctoral Degree) 250,000yen

##### **Global COE program in Digital Humanities Center for Japanese Arts and Cultures**

- 2009 -2011                              Research Grant for Research Assistant type 1 total of 3,000,000yen

##### **Research Fund, Dhurakijpundit University**

- 2008                                      Application of Neural Networks to Business Bankruptcy Analysis in Thailand, BOOK NO: 332.75 ๓277

##### **National Research Council of Thailand**

- 2013                                      Detection of Malicious Code on Mobile Operating Systems  
National Research Council of Thailand: 2556NRCT52002 No. 89086

## **Publications:**

### **Journals**

- 2014 **Worawat Choensawat**, Minako Nakamura and Kozaburo Hachimura: (2014). GenLaban: A tool for generating Labanotation from motion capture data. *Multimedia Tools and Applications*, 1-24, DOI 10.1007/s11042-014-2209-6 (Imapct Factor: 1.058)
- 2014 Chonthorn Ariyapitipan and **Worawat Choensawat**: An Interactive Visualization System for Effective Senior Project Selection, *International Journal of Digital Content Technology and its Applications*, Vol. 8, No. 3, pp. 118-125
- 2013 **Worawat Choensawat** and Piruna Polsiri: Financial Institution Failure Prediction using Adaptive Neuro-Fuzzy Inference Systems: Evidence from the East Asian Economic Crisis, *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Vol.17, No.1, pp.83-92
- 2013/01 **วรวัฒน์ เชิญสวัสดิ์**: ระบบการสืบค้นจากเนื้อหาของข้อมูลจับความเคลื่อนไหวของท่าเต้นรำ, วารสารวิชาการสมาคมสถาบันอุดมศึกษาเอกชนแห่งประเทศไทย ฉบับวิทยาศาสตร์และเทคโนโลยี, ปีที่ 1 ฉบับที่ 1, 2013
- 2012/06 **Worawat Choensawat** and Kozaburo Hachimura: Autonomous Dance Avatar for Generating Stylized Dance Motion from Simple Dance Notations, *The Journal of the Institute of Image Electronics Engineers of Japan*, Vol.41 No.4, pp. 366–370, 2012
- 2012/01 **W. Choensawat**, Woong Choi, and Kozaburo Hachimura, “Similarity Retrieval of Motion Capture Data Based on Derivative Features”, *Journal of Advanced Computational Intelligence and Intelligent Informatics*, Fuji Technology Press, Vol.16, No.1, January 2012, pp. 13-23
- 2010/09 **W. Choensawat**, Sachie Takahashi, Minako Nakamura, Woong Choi, and Kozaburo Hachimura, “Description and Reproduction of Stylized Traditional Dance Body Motion by Using Labanotation”, *Transactions of the Virtual Reality Society of Japan*, Vol.15, No.3, September 2010, pp.379-388
- 2007/03 K. Sookhanaphibarn, P. Polsiri, **W. Choensawat**, Application of neural networks to business bankruptcy analysis in Thailand, *International Journal Computational Intelligence Research*, Volume/Issue, 3/1 2007, pp. 91-96

### **International Conferences & Proceedings**

- 2013/08 Kingkarn Sookhanaphibarn, **Worawat Choensawat**, Chommanad Kijkhun, and Kozaburo Hachimura. “Toward a New Educational Tool for Thai Dance”, The 28th Biennial Conference of the International Council of Kinetography Laban/Labanotation, York University, Toronto, Canada, July 31 to August 7, 2013
- 2013/07 **Worawat Choensawat**, Kingkarn Sookhanaphibarn, Chommanad Kijkhun, and Kozaburo Hachimura: Desirability of a Teaching and Learning Tool for Thai Dance Body Motion, In Proc. of International Conference on Human-Computer Interaction 2013, Las Vegas, Lecture Notes in Computer Science, Vol. 8013, pp. 171–179, 2013

- 2012/11 Minako Nakamura, **Worawat Choensawat**, Kozaburo Hachimura: "The evaluation of LabanEditor3 from a dance researcher's perspective: the case study of Classical Ballet in Labanotation class", Jinmonkon2012 (The computers and the humanities 2012), IPSJ Symposium Series Vol. 2012, No.7, pp. 111-116, Hokkaido University, Japan
- 2012/08 **W. Choensawat**, S. Takahashi, M. Nakamura, and Kozaburo Hachimura and K. Hachimura: "Labanotation: Laban meets Noh", SIGGRAPH 2012, USA, ISBN978-1-4503-1435-0/12/0008, 2012(8)
- 2012/02 **W. Choensawat** and K. Hachimura: "Generating Stylized Dance Motion from Labanotation by Using an Autonomous Dance Avatar", In Proceedings of International Conference on Computer Graphics Theory and Applications, GRAPP2012, Rome, Italy, pp. 535-542, Feb 24-26, 2012
- 2011/10 **W. Choensawat**, S. Takahashi, M. Nakamura, and K. Hachimura: "The Use of Labanotation for Choreographing a Noh-Play", In Proceedings of International Conference on Culture and Computing 2011, Kyoto, Japan, pp. 167- 168, October 20-22, 2011.
- 2011/06 **W. Choensawat**, S. Takahashi, M. Nakamura, and K. Hachimura: "A Labanotation Editing Tool for Description and Reproduction of Stylized Traditional Dance Body Motion", Abstracts of Digital Humanities 2011 (DH2011), Stanford, USA, pp. 296- 299, June 19-22, 2011.
- 2010/06 **W. Choensawat**, W. Choi, K. Hachimura , "Realistic Expression of Body Motion and Environments in LabanEditor"; Nicograph International, Singapore, 2010., 2010/6/18-2010/6/19, pp. 49-51.
- 2010/03 **W. Choensawat**, W. Choi, H. Sekiguchi, and K. Hachimura, "Improved Segmentation of Motion Capture Data using SMOTE"; Proceedings of the IIEEJ Image Electronics and Visual Computing Workshop, Nice, France, 2010,2010/3/5 – 2010/3/7, 4 pages.
- 2009/12 **W. Choensawat**, W. Choi, and K. Hachimura: A Quick Filtering for Similarity Queries in Motion Capture Databases; Bangkok, Thailand, Lecture Notes in Computer Science, Volume 5879, Springer Verlag, pp. 404 – 415, 2009
- 2009/12 **W. Choensawat**, K. Hachimura : Segmentation of Motion Capture Data Using Neural Networks; International Conference of Digital Archives and Digital Humanities 2009, 2009/12/1 – 2009/12/2, National Taiwan University – Taipei, Taiwan.
- 2007/06 Lakesha L. Ruffin, Frank C. Lin, **Worawat Choensawat**, Worapat Prireekreng, Kingkarn Sookhanaphibarn: Diagnosis of Children with ADD/ADHD using a Recurrent Hopfield Net; The Third Shanghai International Symposium on Nonlinear Sciences and Applications (Shanghai NSA'07)
- 2006/10 K. Sookhanaphibarn, P. Polsiri, **W. Choensawat**, and F. C. Lin "Application of Neural Networks to Business Bankruptcy Analysis in Thailand", Proceedings of The 13th International Conference on Neural Information Processing (ICONIP'06), October 2-6, 2006.
- 2006/09 **W. Choensawat**, P. Polsiri, and K. Sookhanaphibarn, "Predicting Financial Institution Failure with Financial and Ownership Variables using Logit and Neural Networks: Evidence from the East Asian Crisis", Proceedings of Joint 3rd International Conference on Soft Computing and Intelligent Systems and 7th International Symposium on advanced Intelligent Systems, (SCIS&ISIS'06), September 20-24, 2006.

### **National Proceedings**

2010/12 **W. Choensawat**, S. Takahashi, M. Nakamura, and K. Hachimura: "Description and Reproduction of Noh Body Motion by Using Labanotation", Jinmonkon2010, IPSJ Symposium Series Vol. 2010, No.15, pp. 285-290, Japan

### **Academic Workshop**

2014/11 **W. Choensawat**, M. Nakamura, and K. Hachimura: " Autonomous Dance Avatar for Generating Stylized Dance Motion from Simple Dance Notations", 1<sup>st</sup> Workshop of Dance Notation and Robot Motion, LAAS-CNRS, Toulouse, France

2010/10 **W. Choensawat**, W. Choi, and K. Hachimura: " Data Filtering with Minimal Bounding Envelope for Similarity Retrieval of Motion Capture Data", The 6th Joint Workshop on Machine Perception and Robotics (MPR2010), Kyushu University Ito Campus, Japan, 2010 (Poster)

2010/09 **W. Choensawat**, S. Takahashi, M. Nakamura, W. Choi, and K. Hachimura: "Description and Reproduction of Stylized Traditional Dance Body Motion by Using Labanotation", The BUAA-Ritsumeikan Workshop on Computer Science and Technology, Beihang University, China, 2010 (Poster)

### **International Symposiums**

2011/01 **W. Choensawat**, Sachie Takahashi, Minako Nakamura, Woong Choi, and Kozaburo Hachimura, "Description and Reproduction of Stylized Traditional Dance Body Motion with LabanEditor", International Symposium of Human Body Motion Analysis with Motion Capture, Jan 29, 2011, Ritsumeikan University, Kinugasa campus, Japan

2010/01 **W. Choensawat**, W. Choi, and K. Hachimura, "A Retrieval System for Similarity Queries in Motion Capture Databases", International Symposium of Human Body Motion Analysis with Motion Capture, Jan 23, 2010, Ritsumeikan University, Biwako campus, Japan

### **Work Experiences:**

2012/06 – Present Lecturer, School of Science and Technology, Bangkok University  
2009/04 – 2012/06 Research Assistant in GCOE Program at Ritsumeikan University, Japan  
2004/11 – 4/2009 Lecturer, Faculty of Information Technology, Dhurakijpundit University Thailand  
2003/09 –2004/04 Computer Sale Manager, Cyber Combat, Australia.  
1999 –2003 Site Engineer, C.S Constuction, Thailand.

### **Certification:**

Sun Certified Programmer for Java[tm] 2 Platform 1.4