

Working Experiences

Nokia Research Center Hollywood, USA | June - Sep. 2011

Research Intern - Solutions for experience sharing via novel interpretation and visualization of real-world sensor data
Adviser - Péter Pal Boda

Create application that demos multimodal integration (speech, gesture, physical activity, badge proximity sensing)

Media Arts and Technology, UC Santa Barbara, USA | Sep. -Dec. 2010, Jan. -March 2011, April - June, 2011

Teaching Assistant - M200A Arts and Technology(George Legrady), M200B Music and Technology(Curtis Roads)
IT Support - Media Arts and Technology program

Center for Nanotechnology in Society, UC Santa Barbara, USA | Feb. -Aug. 2010

Webmaster - Content Management System

Institute of Biomedical Electronics and Bioinformatics, National Taiwan University, Taiwan | 2008 - 2009

Research Assistant - High frequency ultrasound transducer and array fabrication

Institute of Biomedical Engineering, National Yang-Ming University, Taiwan | 2005-2007

Research Assistant - Virtual Reality in Rehabilitation, Finite Element Analysis for Cervical Spine Injury in Collisions
Webmaster - System Admin

Dept. of Rehabilitation, Taipei Veteran General Hospital, Taiwan | 2005-2006

Research Assistant - Clinical experimnt design and statistical data analysis

Patent Office, National Sun Yat-Sen University, Taiwan | 2003-2004

Administrative Assistant - R&D-related patent assistance

Education

PhD Candidate | Media Arts and Technology | University of California, Santa Barbara, USA | 2009-Present

MS | Biomedical Engineering | National Yang-Ming University, Taiwan | 2005-2007

BS | Mechanical & Electromechanical Engineering | National Sun Yat-Sen University, Taiwan | 2001-2005

Skills

Programming Language - C/C++, Java, OpenGL, GLSL, OpenGL ES, Objective-C

Web Development - HTML/CSS/L.A.M.P., HTML5, Drupal, Wordpress, Joomla, Dreamweaver

Mobile Development - iOS, Qt/QML, PhoneGap

CAD/CAE/CAM/VR- 3DMAX, SolidWorks, Virtool, AMIRA, AutoCAD, SketchUp, VRPN, LS-DYNA, ADAMS

Multimedia Design Production - Xcode, OpenFrameWorks, Cinder, Processing, Arduino, MAXMSP, CSound, Super-Collider, Adobe CS5, Logic Pro, Final Cut Pro, After Effect, MacOS, Linux, Windows, LEGO

Installation, Sonification, and performance

“BioRhythm” a Biologically-inspired Audio-Visual Installation

installed at NIME2011, Mindshare L.A., TEDx AlloSphere Open House, EOYS MAT UCSB 2010, BioPac System Inc.

“Ambient Vision” a Kinect-and-Bionomadix(Wireless PPG)-based Interactive Installation

installed at End Of Year Show Media Arts and Technology, University of California Santa Barbara 2011

“ECG-Breathe-Ambient (remix of P.O.M.)” presented at the CREATE concert “Critical Point”, Lotte Lehmann Concert Hall, University of California Santa Barbara on Thursday 13 October 2011.

“P.O.M.” ECG/Stereo Field Recorder Sonification/Mixing

Honorable Mention in the Electronic-Acoustic category in the 2009-2010 Dorothy and Sherrill C. Corwin Awards for Excellence in *Music Composition Competition*, Music Department at University of California Santa Barbara, 2010

Journal and conference papers

Yuan-Yi Fan & Péter Pál Boda (2012), “Multimodal Interaction as Communicative Media of Narrative Form for Experience Sharing” (Presentation proposal accepted. Submitted to Design 2012 International Conference on Design Principles and Practices & An International Journal, 20-22 January, 2012, UCLA, Los Angeles, CA, USA)

Ryan McGee, *Yuan-Yi Fan*, Reza Ali, BioRhythm - a Biologically-inspired Audio-Visual Installation, in Proc. of NIME 2011, The 2011 International Conference on New Interface for Musical Expression, Oslo, Norway, 5/30-6/1, pp. 80-83

Yuan-Yi Fan, Sai-Wei Yang, Using FEM to investigate the cervical spine injury with optimized neck muscle forces during collisions, *Journal of Biomechanics*, Vol. 40 (S2), S724, 2007

Chi-Hung Tsai, *Yuan-Yi Fan*, Sai-Wei Yang, Using virtual reality biofeedback to improve manipulative skill of manual wheelchair users, *Journal of Biomechanics* Vol. 39 (S1): 170, 2006

Awards

“Small Department Regent Fellowship” Graduate Division, University of California, Santa Barbara, USA, 2009

“Absolut Villa”, 1st award, Creative Space Proposal for Campus in Taiwan by Ministry of Education, Taiwan, 2005