

QUALIFICATIONS SUMMARY

Independent, flexible, and highly motivated research engineer with strong personal drive to become an expert in Computer Science and Biomedical Engineering, specializing in machine learning, data mining, and image processing. Proven expertise in rapid prototype design of medical devices and imaging systems like ANSWatch® and Golf Instant Replayer™.

EMPLOYMENT

Graduate Student and Research Assistant, Computer Science in Binghamton University, USA	2006- present
Engineer, Sun Scientific Corporation, Taiwan	2002 - 2006
Associate Engineer, Biomedical Engineering Center (BMEC), ITRI, Taiwan	2000 - 2006
Independent study student and Teaching Assistant, Biomedical Image Processing Lab, Department of Biomedical Engineering, Chung Yuan Christian University, Taiwan	1998 - 2000

EDUCATION

M.S., Department of Computer Science, Binghamton University	GPA: 3.55	2006-present
M.S., Department of Biomedical Engineering, Chung Yuan Christian University; GPA: 3.79, Major GPA: 3.8		1998-2000
<i>Title of thesis: The Application of Tongue Viewing System for Disease Recognition</i>		
B.S., Department of Biomedical Engineering, Chung Yuan Christian University; GPA: 3.27, Major GPA: 3.7		1994-1998

HONORS

Research Assistant Scholarship, Binghamton University	2006
First prize, Medical-Device business model competition, BMEC/ITRI	2004
Excellent Thesis Award, National Biomedical Thesis competition, Taiwan	2000
Scholarship of Agricultural Association, Taiwan	1995

PUBLICATIONS

- Scott Von Duhn, Lijun Yin, Myung jin Ko, and Terry Hung, Multiple-View Face Tracking For Modeling and Analysis Based On Non-Cooperative Video Imagery, IEEE CVPR 2007
- Kuo Feng Hung, Wei-Cheng Liao, Ching-Sung Weng, Wei-Chih Hu, Jenn-Lung Su, The Application of Tongue Viewing System for Diseases Recognition, Journal of Medical, and Biological Engineering Supplement, s53-s59 (Engineering Information), 2002 (EI)
- K.F.Hung, C.C.Lin, Jenn-Lung Su, The Application of Tongue Viewing System in the Illness of Upper Alimentary Canal, Conference of Medical Engineering, pp.377-378, 1996 (Conference)
- Real-time clinical diagnosis expert system for fluorescent spectrum analysis of tissue cells, Patent number: P13910037TW, 20050521~20240606 (Taiwan Patent)
- Technical reports in Industrial Technology Research Institute as follows:
 - Development of Extracorporeal Bio-artificial Liver, 2004
 - A software-programming technical report on automatic bio-molecular sample preparing technology, 2004

RESEARCH ACTIVITIES

- Data Mining on feature selections of human face

- Machine Learning Algorithms on Yahoo Image Search
- Analysis and processing of color medical images such as Chinese-Medicine tongue images
- Independent development of software for the “golf instant replayer” which is the first of its kind, in the world, that provides players and coaches a truly automatic instant feedback on golf swing*
- Creation of algorithms of Autonomic Nervous System(ANS) wrist monitor which can measure 8 major cardiovascular parameters, among them systolic pressure, diastolic pressure, heart rate, heart rate variability (HRV), high frequency component (HF), low frequency component (LF), LF/HF, and number of irregular heartbeats (in 5-min).**
- Extensive Health Level Seven (HL7) and Skype networking communication; My project, Skype Hospitals, is at the quarterfinal of the first Skype API Competition
- Calculation of biomedical signal processing, both of which ranked first in university courses
- Data analysis and training such as Neural Networks
- Medical-device user interface design of ITRI first Extracorporeal Bioartificial Liver System by using the LabVIEW of NI, which can sense blood temperature, bubbles and pH, while also controlling and logging the blood speed.
- Embedded system programming: including: LCD and flash-memory controller using the DSP 2000 (TI); SPO2 waveform network communication using the Rabbit3000 (Zworld); and air cushion bed controller using MSP430 (TI).
- Motor control: In bio-molecular experimental prototype project, I completed a pipette holder with 3D motion functions in DLL form using NI 7334 Motion Controller and Borland C++ Builder.
- Web communication: In ITRI home-care project 2005, my program transmitted ECG, blood pressure, and blood sugar numbers to a server by using Web Services Technology and Borland Delphi.

TRAINING

Amira 3D image processing workshop	2005
ISO9001, ISO13485, ISO-IEEE1073 Standard workshop	2002-2005
Lineo, Embedded Linux Programming course	2001

EXTRACURRICULAR AND SCHOOL ACTIVITIES

Leader of the Service Section, employee organization, BMEC, ITRI	2001-2002
Class representative of Engineering Writing in English course	1998
Director of academic section in university courses	1996
Volunteer to Naotou Sanatorium, Taiwan	1995

ON-LINE REFERENCE

*GolfIR: <http://www.sunscientific.com/>

**AnsWatch(in Chinese): <http://www.taiwanscientific.com.tw/>