RESUME

Wei-Liang Xing (male, born on April 1, 1989, Chinese)

Tel: +616-920-2882
Email: xingwl0401@gmail.com
Address: 700 Health Science Drive, Chapin Department G 1108, Stony Brook, New York, U.S. 11790

EDUCATION

09/2007~06/2011 Tianjin University
College of Precision Instrument and Opto-electronics Engineering
Major: Biomedical Engineering
Degree: Bachelor of Engineering (06/2011)
Overall GPA: 3.62 /4.0
Major Ranking: 4/50

08/2011~ now State University of New York in Stony Brook
Student ID: 108211104
Major: Biomedical Engineering
Degree: Doctor of philosophy (the first year)

STANDARDIZED TEST

TOEFL: S+W+L+R=22+25+20+30=97 **Test Date: 10/09/2010**
GRE: V+Q+A/AW= 500 + 790+ 3.5 **Test Date: 10/24/2009**

PATENTS (Refer to a separate document)

SN	Filing Date	Filing Number	Invention	Inventor
1	20100709	201020254015.8	Bracket for Welding the Circuit Board	first inventor
2	20100709	201020254020.9	Tube with Composite Base Structure	first inventor
3	20100730	201020277530.8	Multifunctional Coin Box	first inventor
4	20100730	201020277540.1	Well-proportioned Daub Machine Used in Coupler of Medical Ultrasonography Probe	first inventor
5	20100730	201020277544.X	Ink Irrigator for Gel Ink Pen	first inventor
6	20100803	201020280451.2	Combinable Multifunctional Bread Board with Collar Structure	first inventor
7	20100323	201010130436.4	Anti-theft Alarm and Directional Tracking System	second inventor

TECHNICAL SKILLS

1. Being skillful in Visual C++, MATLAB, PROTEL 99SE, AutoCAD 2007,Visual Basic, MS Office, Adobe Photoshop, VHDL, Labview, Assembly Language of MCU, etc.
2. Good command of Vector NTI, Premier Primer, E-cell, Simvector, Gene Scan, Gene Construction Kit 2.0, Plasmid Premier2.02, etc.
3. Being able to utilize kinds of literature retrieval of databases, such as IEEE, SCI, EI, NCBI, etc.

INTERSHIP EXPERIENCE

02/2010-03/2010 **Urology and Oncology Department** **Inner Mongolia North Hospital**

Responsibility: rotation training in all departments, mainly worked in Urology and Oncology Department to learn basic medical care knowledge and procedures, such as daily wards inspection, case report writing, basic nursing operation learning; learned primary operation techniques, like urinary catheterization and catheter withdrawn, cystoscopy, circumcision, watching and learning major operations such as tumor excision, etc.

Achievement: For the waste caused in combination of probe and couplant, I invented "Well-proportioned Daub Machine Used in Coupler of Medical Ultrasonography Probe" and applied for a patent.

RESEARCH ASSISSTANT EXPERIENCE

08/2008-12/2010 **Research assistant** **Lab of Biomedical Engineering**

Supervisor: Xue-Min Wang (Associate Professor)

◆ 03/2010-08/2010 The Development of a Traditional Chinese Medicine Sphygmograph

Creative point: for the difficulty of fixing sensor precisely on the patients due to their different wrist diameters, proposed new fixation methods to improve the situation, and adopted watchband shaped non-metallic structures after the discussion with my supervisor.

◆ 09/2010-12/2010 The Construction of Cardiac Impulse Physical Model and Control of Pulsation

Description: building up the physical model of cardiac impulse, simulated heart beating period to assist heart diseases treatment and research.

12/2010-07/2011 **Research assistant** **Lab of Biomedical Engineering**

Supervisor: Yuan-Ming Feng (Professor)

The biomedical application of stereology in the study of clinical Esophagus cancer treatment

Creative point: the **first** use of stereological method in clinical Esophagus cancer treatment; developing and improving the stereological method to be more efficient.

08/2011-now **Research assistant** **Lab of Biomedical Engineering**

Supervisor: Emilia Entcheva (Associate Professor)

The development of Optogenetics in Stem cell treatment and virus treatment in Cardiac field

Creative point: the **first** use of optogenetics in cardiac disease treatment.

Current position

08/2011~ now Teaching assistant in the course of Biomedical instrumentation & Labview

Content: help the professor Lin Wei to prepare for the course, give classes to the students, score the homework and do the lab instruction.

HONORS & AWARDS

2009-2010 Awarded the scholarship from Shanghai Pudong Development Bank (6 candidates in the whole college)

2009-2010 Three A's Student in Tianjin University

2008-2009 Three A's Student in Tianjin University

2007-2008 Three A's Student in Tianjin University

10/2007 The Best Oralist in the Debate Contest in College of Precision Instrument and Opto-electronics Engineering

08/2011~ now The full fellowship and tuition scholarship of Biomedical Engineering in Stony Brook University

RELATED ACADAMIC EXPERIENCE

◆ **01/2010-11/2011 IGEM (International Genetically Engineered Machine Competition) 2010 (Refer to a separate document)**

Director: Ying-Jin Yuan (professor), Wen-Yu Lu (associate professor)

- **Project I -- Lignin Terminator (Collaborative Design)**
- **Project II -- Y-hunter (Collaborative Design)**
- **Project III -- An Indefinite Genetic Counter (Independent Design)**

◆ **05/2010 Polymerase Chain Reaction Equipment Structure and Circuit Design**

Creative point:

1. The reactor container with honeycomb structure contained advantages like solidity, big and even heat area, large adding and sampling speed was permitted.
2. Temperature principle with microwave heat increased the water molecules energy in liquor from molecular level to complete the technical requirement
3. Cooling principle with liquid carbon dioxide had the characters of economic, environmental protection and recycling while meeting the requirement of fast cooling
4. Control principle with tiny magnetism to complete mechanical flow enhanced the heat transmitting in liquor and was convenient to recover.

◆ **04/2010-07/2010 Design of Optoelectronic Pulse Wave Detecting System in Medical Electronics**

Description: To realize the functions of pulse wave signals detection and information extraction, the optoelectronic pulse wave detecting system circuit consisted of electronic apparatus such as photocells, LM324 and some capacitors and resisters, so as to realize the extraction and amplification of the optoelectronic pulse signal. The detecting of pulse is finished by transferring the current circuit into voltage circuit. The circuit components in the circuit are few, concise and precise, so they will effectively obstruct the interferences caused by component matching and cascading. In the actual operation, the system can achieve the real-time detection of human body pulse, and extract good waveforms to achieve the purpose of the experiment.

VOLUNTEER EXPERIENCE

09/2010 Volunteer of Summer Davos Forum (Annual Meeting of the New Champions 2010) in Tianjin

01/2010-03/2010 Volunteer to give palliative care to cancer patients of Inner Mongolia North Hospital

10/2008 Enrolled in CMDP (Chinese Marrow Donor Program)

10/2007 Organized and participated in the voluntary service in Senior's Home

EXTRACURRICULAR ACTIVITIES & ROLES

01/2010-09/2010 As the student assistant of the president office in Tianjin University, having participated in data collecting and editing for the book named *School-running Idea of President in Tianjin University*, which is for the Tianjin University 115th Anniversary

11/2009 Participated in the first Model United Nations of Tianjin University, as the Russia delegate, negotiated with other delegates on the issue related to Environment and Resource

09/2009-09/2010 Member of Drama Club in Tianjin University, having performed in many dramas, like "Rhinos in Love"

2009-2010 As the receptionist for the exchange students from Texas A & M University, provided them with food and accommodation service

05/2008-05/2010 Member of Bicycles Society in Tianjin University

05/2008-09/2010 Member of Outdoor Association in Tianjin University, having traversed Great Maoshan Lush Forests in Hebei Province by myself