

CHARLES YIU

Email: cmyiu@cmu.edu Phone: (412) 805 7391

Address: Apt #301, 229 North Craig Street, Pittsburgh, PA 15213, USA

Online Portfolio: <http://portfolio.charlesyiu.com>

Education

Masters of Human-Computer Interaction, Carnegie Mellon University, PA, USA

Expected Graduation Date: August 2005

Bachelor of Applied Science, University of British Columbia, Vancouver, BC, Canada

Major: **Computer Engineering, Software Engineering**

Minor: Commerce/Business: Accounting, Marketing, Macro-/Micro-Economics, Finance

Departmental top 5% student

Project Experience

A complete list is available at <http://portfolio.charlesyiu.com>.

- **U.S. Office of Naval Research:** Development of Natural-Language based multi-modal interfaces (e.g. speech recognition) for wearable maintenance documentation systems. Utilized a complete set of HCI methods for design generation and prototype implementation
- **AT&T Privacy Bird** software (<http://privacybird.com>): Contextual Design and Usability Analysis of with Dr. Lorrie Faith Cranor
- Design and Implementation of **Portable Digital Photo Album**
- Design and Implementation of **Test Frame Generator**
 - Automatic generation of test frame table from requirement specification documents
- **Digital Dancer** - Java real time dancing game
 - Real time dancing game that utilizes a commercial web cam to track motion
- **Dynamic Icon Support Communication (Disco)**
 - Java implemented instant messaging/chat program using Kinetic Typography to enhance emotional content

Professional Experience

May 2002 – May 2004

Research Participant, Department of Computer Science and Computer Engineering, University of British Columbia

- Worked closely and maintained good relationship with 4 professors
- Constructed a UI for a distributed computing data mining project
- Utilized a syntactic/semantic analysis tool (cgraph) for software system analyses. Developed an XML doc generator plug-in for the tool.
- Designed and planned the development of the haptic media control device (<http://www.cs.ubc.ca/labs/spin/projects/videoEditing.html>)

HCI:

Contextual Inquiry
Cognitive Walkthrough
Persona Design
Prototyping
GOMS Modeling
Heuristic Evaluation
Task Analysis
Think-Aloud Testing
Usability Testing

Software Engineering:

UML
State Chart/FSM
Use Cases
Unit Testing
Extreme Programming
Design Patterns
Rational Unified Process
Software Architecture
Requirement Engineering

Design:

Interaction/Interface
Typographic
Mobile Interface
Data Visualization

Graphics:

InDesign
Photoshop
Illustrator
Firework
Flash

Languages:

Java/JSP/JavaScript
C/C++
XML
HTML
SQL

Other Skills:

Oil/Acrylic painting
Watercolor
Sketching
Asian cooking

- Assisted in developing the backbone and Java programming of NODAL (Network-Oriented Document Abstraction Language) <http://nodal.sf.net>

May 2001 – Dec 2001

Verification Specialist, Soft Tracks Enterprise, Richmond, British Columbia, Canada

- Prepared requirements documentation; established test cases
- Performed exception verification for WAN, LAN, WAP, TCP/IP communications through gateways in a mobile payment application
- Provided assistance and software quality assurance to development team
- Managed the credit card verification database with Toad (SQL database handling software) and the central verification database

May 2000 – August 2000

Programmer and Multimedia Designer, Winstate Technology Ltd., Hong Kong

- Produced educational CD-ROMs for high schools using Macromedia suite and html
- Performed sound streaming, graphic treatment and Flash action script programming

Honors

- Wong's Kong King International Ltd. Scholarship for the best student among 20 schools - a five years tuition and residential full scholarship for studying at UBC
- Charles Lindsay Thompson Scholarship, UBC
- UBC Undergraduate Scholar Program Scholarship
- UBC Dean's Honor List of Engineering
- Member of the Golden Key International Honor Society
- Lorne Manning Hill Memorial Scholarship, UBC
- Hong Kong Government Common Recruitment Exam (CRE) certified
- First Prize of Asian Pacific Economic Cooperation (APEC) art works on science competition (Prize included a round trip to attend an international exchange program in Seoul, Korea as a youth representative of Hong Kong)

Activities

- IEEE Software Engineering Chair and Webmaster at UBC
- ESL tutor at the Clubhouse in downtown Vancouver, BC, Canada
- Summer Events Group Leader at the UBC International House
- AMS (UBC student society) tutoring service tutor for Mathematics, Chemistry and Physics. Attended training workshop with certificate awarded
- ECE team member in Vancouver Sun Run (ranked 4 out of 65 teams)
- Hong Kong youth representative participating in an exchange program in Seoul, Korea organized by the Asia-Pacific Economic Cooperation (APEC)
- University computer subjects tutor

References available upon request