

Lydia Ayers

Curriculum Vitae

AREAS OF SPECIALIZATION:

- Music Composition
- Computer Music and Sound Synthesis
- Musical Tuning Systems (microtonal music and alternate tunings)
- Extended Flute Techniques
- Native American and Chinese flutes (*dizi, xiao, xun, paixiao, koudi*)
- Synthesizing Musical Expression
- Ethnomusicology (specializing in Chinese and Indonesian music)
- Music Theory

EXPERIENCE:

2005-present	Composer
1997-2005	Visiting Assistant Professor, The Hong Kong University of Science & Technology, Computer Science Department
1995-1996	Postdoctoral Fellow, The Chinese University of Hong Kong, Music Department
1994-1996	Visiting Scholar, Hong Kong University of Science and Technology
1994-1997	Private Flute Teacher
1992-1994	Teaching Assistant, University of Illinois, Urbana-Champaign, Illinois

EDUCATION:

1994	Doctor of Musical Arts in musical composition (computer music) at the University of Illinois at Urbana-Champaign
1984	Bachelor of Fine Arts in musical composition from California Institute of the Arts
1989 & 1990	Robert Dick flute master classes in Bangor, Maine and Montréal, Québec
1986 & 1988	Darmstadt, Germany composition master classes (Feriencourse für Neue Musik)
1985	IRCAM (French National Computer Music and Acoustics Research Center), Paris, France, Instrumental Research Studio master class

PUBLICATIONS:

Compositions and Commissions (see separate document)
Performances of Compositions (see separate document)
Publications (see separate document)

RESEARCH GRANTS:

2002-2003	RGC Competitive Earmarked Research Grant: <i>Synthesizing Grace Notes and Trills for Chinese flutes</i> , HK\$238,805
2001-2002	RGC Direct Allocation Grant: <i>Spectral Modeling of Chinese Instruments</i> , HK\$30,000

HONORS AND AWARDS:

2003	Plenary Paper, 2003 International Computer Music Conference, Singapore
2001	Excellence in Teaching Innovation Award, HKUST
1991	Two <i>Meet the Composer</i> awards
1990-1995	Six ASCAP awards

COURSES TAUGHT:

Spring 2005:	Exploring Music: Music Technology and Creation
	Introduction to Computer Music
Spring 2004:	Introduction to Computer Music
	Music of the World
Fall 2003:	Music of the World
	Enjoyment of Western Music
Spring 2003	Introduction to Computer Music
	Music of the World
Fall 2002:	Programming Fundamentals
	Enjoyment of Western Music
Summer 2002:	Music of the World
Spring 2002:	Introduction to Computer Music
	Music of the World
Fall 2001:	Programming Fundamentals
	Music Appreciation
Summer 2001:	Music of the World
Spring 2001:	Introduction to Computer Music
	Music Appreciation
Fall 2000:	Programming Fundamentals
	Music Appreciation
Summer 2000:	Music Appreciation
Spring 2000:	Introduction to Computer Music
	Music Appreciation
Fall 1999:	Computer Fundamentals
	Music Appreciation
Spring 1999:	Introduction to Computer Music
	Computer Fundamentals
Fall 1998:	Introduction to Computer Music
	Advanced Computer Music
Spring 1998:	Computer Music
	Computer Fundamentals
Fall 1997:	Computer Music, L1
	Computer Music, L2

M.PHIL. STUDENTS:

- Anthony Yip Ming Ho, 1999-2001, M.Phil., "Analysis and Synthesis of the Chinese Qin."

UNDERGRADUATE FINAL YEAR PROJECT SUPERVISION:

- "Erhu Synthesis," Woo Pak Tuen, 2004-2005
- "A Musical Tuning Application for Palms," Tang Yiu Chung, Ku Heung Chin, Ng Ho Yin, 2004-2005
- "Tales of the Tastes RPG Game," Lam Yik Fung, Mak Ka Cheong, Lam Kin Pong, 2004-2005
- "The University of the Dead Adventure Game," Tsang Ho Yin, Yim Hin Chun, Leung Wai Kei, 2004-2005
- "The myth of the UST Messiah Adventure Game," Yip Ka Kei, Lam Yiu Kei, Ho Tsun Kit, 2004-2005
- "HKUST Olympic 2020 Adventure Game," Wong Chun Yu, Ng Kwok Ching, 2004-2005
- "Good news for 2005 Graduating Students! (Adventure Game)," Lee Hing Ming, Ng Sze Ho, Chan Kwok Pui, Ling Tak Wai, 2004-2005
- "Kellogg RPG Game," Kong Ka Chun, Wong Ka Lun, Wong Yuk Yee, 2004-2005
- "UST Monopoly Adventure Game" Tommy Cheung Chung Him, Wong Kai Chung, Lam Cheuk Fung, 2004-2005
- "SnOoZiNgMaN Adventure Game," Tang Shiu Leung, Hui Chi Kit Jackie, 2003-2004.
- "Adventure Game: HKUST in StoneAge," Chan Wing Yuen, Lee Ka To, 2003-2004.
- "UST Adventure Game – XP2 in UST," Au Tsz Lok Chris, Chan Yat Fai Gram, Law King Yiu Gil, Tsang Kei Man Raymond, 2003-2004.
- "Java Composer," Edgar Hung Yik Kai, Leung Tat Pong and Lai Hoi Suet, 2000-2001
- "Musical Mode Room in Java," Simon Sum Chi-Wing and Jonathan Cheung Hong Hoi, 2000-2001
- "Port Just Intonation Calculator to PC," Alvin Cheung Chi Chun and Daniel Suek Sai Hang, 1999-2000
- "Wavetable Breeding," Mak Yiu Man and Anthony Tsui Hip Lun, 1999-2000

UG STUDENT PRIZES:

- Francis Fu Ka-man, Wong Wai-Chong Prize for Undergraduate Humanities for an assignment in *Music of the World* (HUMA 100F), Spring 2002

PROFESSIONAL SERVICE:

Professional Service:

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| 2004 | Reviewer for RGC grant |
| 1997-2001 | Member of the Board, International Computer Music Association |
| 1999 | Chair, Music Program Committee, 1999 International Computer Music Conference |
| 1998 | Program committee member, International Computer Music Conference |
| 1996 | Chair, 1996 International Computer Music Conference (Hong Kong) |

University Service:

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| 2004 | Computer music demo for Sun Wa, potential donor for the new CS Multimedia Center |
| 2004 | Performed alto flute and Native American flute at the Computer Science Alumni Association Dinner |
| 2002-2003 | Teaching and Learning Quality Process Review Committee, Division of Humanities |
| 2002 | <i>Jazz Up Your Courses, Using PowerPoint and Composing a Web Page</i> , Humanities Hands-On Workshop |
| 1997-2005 | Chinese Computer Music Demos for "Show and Tell" lab tours |

Community Service:

- 2003 Computer music talk at Chinese Foundation Secondary School for all students and teachers
- 2000 Computer music talk for Chinese Foundation Secondary School choir and orchestra students and teachers
- 2000 Quality Education Fund (QEF) computer music talk for secondary school music teachers
- 1995 Participated in the Chinese University (Javanese) gamelan
- 1996 Participated in the University of Hong Kong (Balinese) gamelan
- 1994 Guest lecture at The University of Hong Kong
- 1994 Guest lecture at The Hong Kong Baptist University
- 1994 Guest lecture at The Hong Kong University of Science and Technology
- 1993 Featured Guest Composer at the NOW Music Festival at Capital University, Columbus, Ohio
- 1990 Artist-in-Residence, Center for Electronic Music, New York, New York

INVENTIONS:

- 1986-1992 Collaborated with Stacy Bowers at Woodstock Persussion in creating the Woodstock Gamelan, a microtonal percussion instrument with a 75-tone octave

PROFESSIONAL ASSOCIATIONS:

- Australasian Computer Music Association
- Composers and Authors Society of Hong Kong
- International Computer Music Association
- International Native American Flute Association
- Just Intonation Network
- National Flute Association
- Society for Electro-Acoustic Music in the United States

PRINCIPAL TEACHERS:**Composition:**

- Barry Schrader
- William Brooks
- Morton Subotnick
- Harold Budd
- Alan Chaplin
- Ezra Laderman
- Elie Yarden

Computer Music:

- Charles Dodge
- James Beauchamp

Flute:

- Patricia Spencer
- Robert Dick
- Thomas Nyfinger

Extended Vocal Techniques:

- Joan La Barbara

Chinese Flutes (*Dizi, Xiao, Xun, Paixiao, Koudi*):

- Chan Chun Nin, William

Ethnomusicology (my minor area for the D.M.A.):

- Bruno Nettl
- Charles Capwell
- Sam Chianis
- Amiya Dasgupta
- L. Subramaniam

FOREIGN LANGUAGES:

Fluent in French; conversant in Spanish and German; some Arabic and Italian