

Hiroki NISHINO

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Summary

I am currently serving as an assistant professor at the School of Creativity and Art, ShanghaiTech University, Shanghai, China. I am a researcher in creative technologies with a significant interest in both computer science research and creative practices in computer music, media art and programming language design/development for creative coding.

My research interest is how information technology can help growing creativity, intimacy and empathy among individuals in our society.

I have a very interdisciplinary research background, including computer music, programming language, virtual reality and interaction design. During my doctoral study at National University of Singapore (NUS), I designed and developed a new computer music programming language from scratch, including compiler, virtual machine with the features such as sound synthesis, garbage collection and time-constraints. I also invented various topology-based hybrid marker tracking techniques for augmented reality and tangible

interaction. For these research works, I was awarded several international & domestic prizes.

I have background also in creative practices in sonic arts and digital art. Before transferring to NUS, I studied computer music at University of Washington, Seattle. The sonic artworks that I composed during this study were selected for concert presentations at international festivals across America, Europe and Asia. Some of them won prizes in various international competitions.

I have excellent supervision skills for student research. Some of undergraduate students under my supervision have been publishing their works at top international conferences in interaction design (SIGGRAPH and SIGGRAPH Asia). One of my students even won the 3rd place at the ACM SIGGRAPH Student Research Competition 2019. This is quite exceptional to happen for undergraduate design students even in top-ranked universities.

Education

National University of Singapore

SINGAPORE

Ph.D. in Integrative Sciences & Engineering

Cum. GPA 4.17 (5.0 scale) | Aug 2009 – Jul 2014

Thesis: LC: A Mostly-strongly-timed Prototype-based Computer Music Programming Language that Integrates Objects and Manipulations for Microsound Synthesis

Supervisor : Prof. Ryohei Nakatsu

Advisory Committee : Prof. Steven Miller (chair, National University of Singapore)

: Prof. Naotoshi Osaka (member, Tokyo Denki University)

Thesis Examiners : Prof. Brad Garton (Columbia University)

: Prof. Eric Lyon (Virginia Tech)

: Prof. Roger Zimmermann (National University of Singapore)

University of Washington, Seattle

WA, USA

Digital Arts and Experimental Media Ph.D. program

Cum. GPA 3.84 (4.0 scale) | Sep 2005 – Jul 2007

(officially withdrawn in 2008)

Keio University

KANAGAWA, JAPAN

Master of Media and Governance

Sep 1999 – Sep 2001

Keio University

KANAGAWA, JAPAN

B.A. in Policy Management

Apr 1992 – Sep 1996

Research Experience

Kochi University of Technology University

The School of Information

Associate Professor

●research, practices and education in creative technologies

KOCHI, JAPAN

Apr '21 – present

ShanghaiTech University

The School of Creativity and Art

Assistant Professor

●research, practices and education in creative technologies

SHANGHAI

Apr '20 – Feb '21

Chang Gung University Department of Industrial Design Assistant Professor • research and practices in creative technologies, STEM education for design students	TAIWAN Aug '16 – Feb '20
Imagineering Institute Research Fellow • computer music systems, human computer interaction, animal computer interaction	MALAYSIA Dec '15 – Jul '16
Keio University Graduate School of Media Design Visiting Researcher • supported video streaming of the remote lecture 'Cool Japan' by Prof. Kazunori Sugiura between Keio University (Japan) and National Cheng Kung University (Taiwan)	JAPAN Apr '14 – Mar '15
National University of Singapore Interactive & Digital Media Institute Ph.D. Student Research Scholar • Designed and developed a new computer music language for my doctoral study from scratch (compiler/virtual machine/sound synthesis engine). • Invented various novel topology-based hybrid marker tracking techniques for tangible interaction & augmented reality. • Published 18 peer-reviewed papers as a first author.	SINGAPORE Aug '09 – July '14
Visiting Artist Research Technologist • Researched topology-based marker tracking techniques. • Funded by Pola Art Foundation's <i>Grants for Oversea Study by Young Artists</i> .	Jun '08 – Jun '09
University of Washington, Seattle Digital Arts and Experimental Media Ph.D. program Ph.D. Student Teaching Assistant Research Assistant Instructor • Creative practices in sonic arts. • Teaching assistant/research assistant for computer music and media art courses. • Taught an introductory computer music course as a main instructor. • Developed new render farm software for AutoDesk MAYA, which utilizes 50 Macintosh computers for distributed-rendering in the multi-user environment, as a voluntary work.	SEATTLE (WA), USA Sep '05 – Jul '07
Yokosuka Research Center, NTT laboratory Intern Internship at Digital Signal Processing Group	KANAGAWA, JAPAN Mar '00 – Apr '00

Professional Experience

Freelance Software Engineer Self-employed • Software design and development for Unix, Windows, iOS, Android etc.	TOKYO, JAPAN Jun '05 – present
Iiga, Co., Ltd. Chief Engineer, RF-ID team • Developed (possibly the world's first) web-based RF-ID readers. • Developed the middleware for RFID systems. • Many RF-ID projects as a chief software engineer, including one of the largest RF-ID experiments of the time (over 100,000+ RF-ID tag distribution among participants) by Auto-ID Lab Japan.	TOKYO, JAPAN Nov '03 – May '05
Beat, Inc. Senior Software Engineer • Developed many web-based applications in Java. • Developed native objects to integrate C/C++ libraries into the runtime environment of PHP and Java.	TOKYO, JAPAN Aug '02 – Oct '03
Eagle, Co., Ltd. Software Engineer Java Instructor • Developed and taught an introductory Java programming course. • Other miscellaneous software development	TOKYO, JAPAN Feb '02 – Jul '02
Global Knowledge Network Japan, Ltd. Java Instructor • Taught both introductory and advanced Java programming courses.	TOKYO, JAPAN Oct '01 – Feb '02

Eagle, Co., Ltd.

TOKYO, JAPAN

Software Engineer | C Instructor

Feb '98 – Aug '99, Mar '01 – Jul '01

- Software development in C/C++, Visual Basic & Shell script (both stand alone & client-server systems).
- Developed and taught an introductory C programming course for new graduates.
- Led and mentored a small team of new graduates (3-5) as a part of their on-the-job training

RICOH System Kaihatsu CO., Ltd.

TOKYO, JAPAN

Software Engineer

Mar '97 – Dec '97

- Software development in C/C++ & Visual Basic.
 - Developed several prototype medical applications
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Teaching Experience (Lectures)

ShanghaiTech University
School of Creativity and Art

SHANGHAI, CHINA

Assistant Professor

Apr 2020 - Present

Undergraduate Course(s)
ARTS1409: Introductory Interaction Design

Chang Gung University
Department of Industrial Design

TAIWAN

Assistant Professor

Aug 2016 - Present

Undergraduate Course(s)
ID2006: Basic Media and Communication Design II
ID3006: Media and Communication Design(I)
ID3120: Programming
ID3119: Hardware and Software Design
ID3702: Design Survey
ID4204: Design and Ethics Lectures (1)

Graduate Course(s)
IDM013: Guided Reading on Current Literature (1)
IDM014: Guided Reading on Current Literature (2)

National University of Singapore
NUS Graduate School for Integrative Sciences and Engineering

SINGAPORE

Teaching Assistant

Jan '11 – Jun '11

undergraduate/graduate course(s) UAR2204: Sonic Arts and Sciences

University of Washington, Seattle
Digital Arts and Experimental Media Ph.D. program

WA, USA

Instructor | Teaching Assistant

Sep '05 – Jun '07

Instructor
Graduate Course(s)
DXARTS460: Digital Sound

Teaching Assistant
Graduate Course(s)
DXARTS461: Digital Sound Synthesis
DXARTS462: Digital Sound Processing
DXARTS463: Advanced Digital Sound Synthesis and Processing
DXARTS470: Sensing and Control Systems for Digital Art

Keio University

KANAGAWA, JAPAN

Teaching Assistant

Sep '99 – Aug '01

Undergraduate Course(s) at Faculty of Environment and Information Studies
Seminar: Music by Dr. Nathaniel Tull Phillips
Information Processing II: Music

Graduate Course(s) at Graduate School of Media and Governance
Computer Music
Audio Environment
Media Space

Teaching Experience (Workshops)

National Cheng Kung University

The Arduino Workshop

A workshop to prototype an interactive picture book with the Arduino.

The workshop participants are undergraduate and graduate students with various backgrounds.

TAIWAN

Jun/29-Jun/30, 2017

Teaching Experience (Others)

Chang Gung University

Certificate of Competence (in teaching the courses of expertise in English)

The certificate was obtained after the participation and the successful completion of the English Teaching Workshop training program.

TAIWAN

July/02, 2018

Skills

Programming:

- C/C++ • Java • Python • Max/MSP • PureData • SuperCollider • LISP • Objective-C • Object Pascal
- PHP • Visual Basic etc.

Others:

- Compiler/Interpreter • Garbage Collection • Virtual Machine • Computer Music • Augmented Reality
- Creative Coding

Natural languages:

- Japanese (*native*) • English (*fluent*) • Mandarin (*Elementary*)
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Awards (Research)

1. Finalist IMAGES OF RESEARCH 2016, CITY UNIVERSITY OF LONDON
for the effective presentation of the work 'Fair Use Portraits' in a single image.
2. Special Recognitions for Reviewing ACM SIGCHI 2015
The "Special Recognition" received. "The Chairs and Associate Chairs for CHI Papers have the option of granting a limited number of "special recognitions" to those who do one or more exceptional reviews" (from the SIGCHI review system website; not open to public).
3. Semifinalist THE ACM SPLASH STUDENT RESEARCH COMPETITION 2012
Mostly-strongly-timed programming
4. Best Paper Nominee THE SOUND AND MUSIC COMPUTING CONFERENCE 2012
LCSynth: A Strongly-timed Synthesis Language that Integrates Objects and Manipulations for Microsounds
5. The Third Place Prize THE ACM SPLASH STUDENT RESEARCH COMPETITION 2011
Misfits in Abstractions: Toward User-centered Design in Domain-specific Languages for End-user Programming
6. MITOH Super Creator INFORMATION PROCESSING PROMOTION AGENCY, JAPAN: THE MITOH PROGRAM 2010
"The MITOH Program aims to discover and develop outstanding human resources called Super Creators. Specifically, these are persons possessing creative ideas and skills for achieving software innovation and who can put these ideas and skills to use". <http://www.ipa.go.jp/english/humandev/third.html>

7. Semifinalist THE ACM SIGGRAPH STUDENT RESEARCH COMPETITION 2010
A Shape-free Designable 6DoF Marker Tracking Method
8. Semifinalist THE ACM SIGPLAN/PLDI STUDENT RESEARCH COMPETITION 2008
MiniSynth: Yet-another Domain-specific Computer Music Sound Synthesis Language
9. Semifinalist THE ACM SIGGRAPH STUDENT RESEARCH COMPETITION 2007
DXRenderFarm: Xgrid-based renderfarm for Maya

Awards (Computer Music/Media Art)

1. Winner THE 1ST LEONARDO ART/SCIENCE STUDENT CONTEST, 2008
Oberhausen Requiem
2. Prize in Performance Art Section DIGITAL CONTENT AWARD, ASIAGRAPH 2008
Tre Marie
3. Prize in Performance Art Section DIGITAL CONTENT AWARD, ASIAGRAPH 2008
Oberhausen Requiem
4. Prize in Electronic Music Section DIGITAL CONTENT AWARD, ASIAGRAPH 2008
Seattle Noise and Pulse Study
5. Prize in Electronic Music Section DIGITAL CONTENT AWARD, ASIAGRAPH 2008
Minimalism X
6. The Motus Prize THE CONTEMPORARY COMPUTER MUSIC CONCERT (CCMC) 2008
L'ATELIER DE CRÉATION SONORE ET MUSICALE 116 (ACSM 116), THE CHIEF JURY: DENNIS DUFOUR
Self-Portrait of My Life
7. Winner THE MONO@GASOMETER COMPETITION
DEGEM (DEUTSCHE GESELLSCHAFT FÜR ELEKTROAKUSTISCHE MUSIK), 2007
Oberhausen Requiem

Grants

1. Startup Funding, ShanghaiTech University SHANGHAI, CHINA
Principal Investigator, About 282,800 USD (RMB 2,000,000, 1RMB = 0.14USD) Apr '20 – Mar '24
for the research funding to establish a new research group at The School of Creativity and Art
2. Research Project for Newly-recruited Personnel, The Ministry of Science and Technology TAIWAN
Principal Investigator, About 25,000 USD (750,000 TWD, 1 TWD = 0.034 USD) Aug '18 – Jul '20
for the research on hybrid novice programming language for rapid prototyping in interaction design
3. The MITOH program, Information-Technology Promotion Agency, Japan JAPAN
Principal Investigator, About 69,400 USD, (6,940,000 JPY, 100 JPY = 1 USD) Jun '09 - Jan '10
for the research on a shape-free, designable, 6DoF topology-based marker tracking technique for mobile devices
4. The Grants for Overseas Study by Young Artists, Pola Art Foundation JAPAN
Principal Investigator, About 30,000 USD (3,000,000 JPY, 100 JPY = 1 USD) Jun '08 - Jun '09
for the research residency at National University of Singapore
5. The Mori Grant, Keio University KANAGAWA, JAPAN
Principal Investigator, About 3,000 USD, (300,000 JPY, 100 JPY = 1 USD) Apr '00 - Mar '01
for the independent study on computer music software framework design

Scholarships

1. The NGS Scholarship, National University of Singapore SINGAPORE
Stipend: About 135,680 USD (169,600 SGD, 1 SGD = 0.8 USD) & Tuition Waiver Aug '09 – Jul '13
Tuition waiver, monthly stipend (3200 SGD) and conference allowance (4000 SGD per year)
 2. Teaching assistantship, University of Washington, Seattle WA, USA
Stipend: About 54,000 USD & Tuition waiver Sep '05 – Jul '08
Tuition waiver + salary (approximately 1500 USD per month)¹
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Coursework

At National University of Singapore SINGAPORE

Undergraduate Course(s)

CS4212 : Compiler Design

Graduate Course(s)

NM5660 : Independent Study

NM6600 : Independent Study

CS5214 : Design of Optimising Compiler

GS6886A : Responsible Conduct of Research in Sciences and Engineering

At University of Washington, Seattle WA, USA

Undergraduate Course(s)

EE235 : Continuous Time Linear Systems

Graduate Course(s)

ENGL102 : Adv. ESL for Int'l TA

DXARST460 : Digital Sound

DXARST461 : Digital Sound Synthesis

DXARST462 : Digital Sound Processing

DXARST463 : Advanced Digital Sound Synthesis and Processing

DXARST567 : Sound in Space

DXARST471 : Mechatronic Art I

DXARST472 : Mechatronic Art II

DXARST500 : Research Studio

DXARST600 : Independent Study

MOOC courses (with certification)

Compilers/Programming Languages

1. Compilers

by StanfordOnline, an online learning initiative of Stanford University on Jan 09, 2022

Digital Arts

2. Introduction to Programming for Visual Arts with p5.js

by Stan on Kadenze.com, Certificate earned on Sep 06, 2018

3. Creative Programming for Digital Media & Mobile Apps

by University of London, Goldsmiths on Coursera, Certificate earned on Sep 06, 2018

4. The Nature of Code

by Processing Foundation on Kadenze.com, Certificate earned on Nov 14, 2018

Deep Learning

1. Neural Network and Deep Learning
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¹withdrawn after the second year.

- by deeplearning.ai on Coursera, Certificate earned on May 28, 2018
- 2. Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization
 - by deeplearning.ai on Coursera, Certificate earned on Jun 07, 2018
- 3. Structuring Machine Learning Projects
 - by deeplearning.ai on Coursera, Certificate earned on Jun 11, 2018
- 4. Convolutional Neural Networks
 - by deeplearning.ai on Coursera, Certificate earned on Jul 4, 2018
- 5. Sequence Models
 - by deeplearning.ai on Coursera, Certificate earned on Jul 20, 2018
- 6. Build Basic Generative Adversarial Networks (GANs)
 - by deeplearning.ai on Coursera, Certificate earned on Oct 13, 2020
- 7. Build Better Generative Adversarial Networks (GANs)
 - by deeplearning.ai on Coursera, Certificate earned on Oct 16, 2020
- 8. Apply Generative Adversarial Networks (GANs)
 - by deeplearning.ai on Coursera, Certificate earned on Oct 31, 2020
- 9. Mathematics for Machine Learning: Linear Algebra
 - by Imperial College London on Coursera, Certificate earned on Jul 29, 2018

Internet of Things

- 1. Introduction to the Internet of Things and Embedded Systems
 - by University of California, Irvine on Coursera, Certificate earned on Jun 18, 2020
- 2. The Arduino Platform and C Programming
 - by University of California, Irvine on Coursera, Certificate earned on Jun 25, 2020
- 3. Interfacing with the Arduino
 - by University of California, Irvine on Coursera, Certificate earned on Jul 17, 2020

Digital Signal Processing/Computer Music/Sound Synthesis

- 1. Digital Signal Processing
 - by École Polytechnique Fédérale de Lausanne on Coursera, completed on Jun 12, 2017
- 2. Physic-Based Sound Synthesis for Games and Interactive Systems
 - by Stanford University on Kadenze.com, Certificate earned on Dec 23, 2020

Digital Humanities

- 1. DH101: Introduction to Digital Humanities
 - by HarvardX (an online learning initiative of Harvard Univ.) on edX, Certificate earned on Aug 29, 2020

Digital Game

- 1. Serious Gaming
 - by Erasmus University Rotterdam on Coursera, Certificate earned on Oct 13, 2017
- 2. Introduction to C# Programming and Unity
 - by University of Colorado System on Coursera, Certificate earned on Jan 17, 2019
- 3. More C# Programming and Unity
 - by University of Colorado System on Coursera, Certificate earned on Feb 05, 2019
- 4. Intermediate Object-Oriented Programming for Unity Games
 - by University of Colorado System on Coursera, Certificate earned on Feb 19, 2019
- 5. Data Structures and Design Patterns for Game Developers

by University of Colorado System on Coursera, Certificate earned on Mar 11, 2019

Statistics with R Specialization

1. Introduction to Probability and Data

by Duke University on Coursera, Certificate earned on Oct 31, 2017

2. Inferential Statistics

by Duke University on Coursera, Certificate earned on Dec 22, 2017

3. Linear Regression and Modeling

by Duke University on Coursera, Certificate earned on Dec 23, 2017

Survey Data Collection and Analytics Specialization

1. Framework for Data Collection and Analysis

by University of Maryland, College Park on Coursera, Certificate earned on Dec 31, 2016

2. Data Collection: Online, Telephone and Face-to-face

by University of Michigan on Coursera. Certificate earned on Jan 10, 2017

3. Questionnaire Design for Social Surveys

by University of Michigan on Coursera. Certificate earned on Jan 23, 2017

4. Dealing With Missing Data

by University of Maryland, College Park on Coursera. Certificate earned on Jan 12, 2017

Mandarin

1. Chinese for Beginners

by Peking University on Coursera, Certificate earned on Dec 21, 2016

2. More Chinese for Beginners

by Peking University on Coursera, Certificate earned on Dec 31, 2016

MOOC courses (without certification)

Digital Signal Processing

1. Audio Signal Processing for Musical Applications

by Universitat Pompeu Fabra and Stanford University, completed on Jun 4, 2020

Publication List

Book Chapters (peer-reviewed)

As First & Corresponding Author

1. H. Nishino & R. Nakatsu, COMPUTER MUSIC LANGUAGES AND SYSTEMS: THE SYNERGY BETWEEN TECHNOLOGY AND CREATIVITY
The Handbook of Digital Games and Entertainment Technologies, Springer, 2015 Dec. pp.1-49
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Journal Papers (peer-reviewed, full papers)

As First & Corresponding Author

1. H. Nishino & R. Nakatsu, PERFORMING STFT AND ISTFT IN THE MICROSOUND SYNTHESIS FRAMEWORK OF THE LC COMPUTER MUSIC PROGRAMMING LANGUAGE
Journal of Information Processing, Vol. 24, No.3, Special issue Extensions and Advances in Music Information Processing. Information Processing Society of Japan, 2016 Feb. pp.483-491.
 2. H. Nishino, N. Osaka & R. Nakatsu, THE MICROSOUND SYNTHESIS FRAMEWORK IN THE LC COMPUTER MUSIC PROGRAMMING LANGUAGE
Computer Music Journal Vol. 39, No. 4, The MIT Press, 2015 Winter. pp.49-79
 3. H. Nishino, TOPOLOSURFACE: A 2D FIDUCIAL TRACKING SYSTEM BASED ON TOPOLOGICAL REGION ADJACENCY AND ANGLE INFORMATION
Journal of Information Processing, Vol 18, No.2, Special Issue for Interaction Technique. Information Processing Society of Japan, 2010 Jun. pp.16-25
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Conference Papers (peer-reviewed, full papers)

As First & Corresponding Author

1. H. Nishino, UNIT-GENERATOR GRAPH AS A GENERATOR OF LAZILY-EVALUATED AUDIO-VECTOR TREES
The 15th Sound and Music Computing Conference (SMC 2018), Cyprus, 2018 July.
2. H. Nishino, UPDATE-CACHING TECHNIQUE FOR UNIT-GENERATOR-BASED SOUND SYNTHESIS
The 43rd International Computer Music Conference (ICMC 2017), Shanghai, China, 2017 Oct.
3. H. Nishino & A. Cheok, SPECULATIVE DIGITAL SOUND SYNTHESIS
The 13th Sound and Music Computing Conference (SMC 2016), Hamburg, Germany, 2016 Aug. pp.358-365.
4. H. Nishino & A. Cheok, LAZY EVALUATION IN MICROSOUND SYNTHESIS
The 13th Sound and Music Computing Conference (SMC 2016), Hamburg, Germany, 2016 Aug. pp.350-357.
5. H. Nishino, N. Osaka & R. Nakatsu, LC: A NEW COMPUTER MUSIC LANGUAGE WITH THREE CORE FEATURES
The Joint Conference of The 40th International Computer Music Conference (ICMC 2014) & The 11th Sound and Music Computing Conference (SMC 2014), Athens, Greece, 2014 Sep. pp.1565-1572.
6. H. Nishino & R. Nakatsu, MOSTLY-STRONGLY-TIMED PROGRAMMING IN LC
The Joint Conference of The 40th International Computer Music Conference (ICMC 2014) & The 11th Sound and Music Computing Conference (SMC 2014), Athens, Greece, 2014 Sep. pp.1581-1586.

7. H. Nishino, N. Osaka & R. Nakatsu, UNIT-GENERATORS CONSIDERED HARMFUL (FOR MICROSOUND SYNTHESIS): A NOVEL PROGRAMMING MODEL FOR MICROSOUND SYNTHESIS IN LCSYNTH
The 39th International Computer Music Conference (ICMC 2013), Perth, Australia, 2013 Aug. pp.148-155.
 8. H. Nishino, N. Osaka & R. Nakatsu, LC: A STRONGLY-TIMED PROTOTYPE-BASED PROGRAMMING LANGUAGE FOR COMPUTER MUSIC
The 39th International Computer Music Conference (ICMC 2013), Perth, Australia, 2013 Aug. pp.140-147.
 9. H. Nishino & N. Osaka, LCSYNTH: A STRONGLY-TIMED SYNTHESIS LANGUAGE THAT INTEGRATES OBJECTS AND MANIPULATIONS FOR MICROSOUNDS
The 9th Sound and Music Computing Conference (SMC 2012), Copenhagen, Denmark, 2012 Jul. pp.395-402.
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Conference Papers (peer-reviewed, short papers)

As First and Corresponding Author

1. H. Nishino, ON-STACK COMPUTATION OF AUDIO VECTORS FOR UNIT-GENERATOR-BASED SOUND SYNTHESIS
International Workshop on Computer Music and Audio Technology (WOCMAT), Hsinchu, Taiwan, 2018 Nov.
2. H. Nishino, N. Podari, S. Sini, C. Edrington & A. Cheok, ALICE AND HER FRIEND: A BLACK 'PICTURE BOOK' OF MULTISENSORY INTERACTION FOR VISUALLY-IMPAIRED CHILDREN
The 13th Conference on Advances in Entertainment Technology (ACE 2016), Osaka, Japan, 2016 Nov. pp.12:1-12:6
3. H. Nishino, AN EXPERIMENTAL CLASSIFICATION OF THE PROGRAMMING PATTERNS FOR SCHEDULING IN COMPUTER MUSIC PROGRAMMING
The Joint Conference of The 40th International Computer Music Conference (ICMC 2014) & The 11th Sound and Music Computing Conference (SMC 2014), Athens, Greece, 2014 Sep. pp.1156-1159
4. H. Nishino, DEVELOPING A NEW COMPUTER MUSIC LANGUAGE IN THE 'RESEARCH THROUGH DESIGN' CONTEXT
The Doctoral Symposium, The Third ACM SIGPLAN conference on Systems, Programming, Languages and Applications: Software for Humanity (ACM SPLASH 2012), AZ, USA, 2012 Oct. pp.45-48
5. H. Nishino, ON CONCEPTUAL MISFITS IN COMPUTER MUSIC PROGRAMMING
The Second Asia Computer Music Project, Tokyo, Japan, 2011 Dec.
6. H. Nishino, COGNITIVE ISSUES IN COMPUTER MUSIC PROGRAMMING
The 11th International Conference on New Interfaces for Musical Expression (NIME 2011), Oslo, Norway, 2011 May. pp.499-502
7. H. Nishino, A SHAPE-FREE DESIGNABLE 6DoF MARKER TRACKING METHOD FOR CAMERA-BASED INTERACTION IN MOBILE ENVIRONMENT
The 18th ACM International Conference on Multimedia (ACM MM 2010), Florence, Italy, 2010 Oct. pp.1055-1058
8. H. Nishino, A 6DoF FIDUCIAL TRACKING METHOD BASED ON TOPOLOGICAL REGION ADJACENCY AND ANGLE INFORMATION FOR TANGIBLE INTERACTION
The Fourth ACM International conference on Tangible Embedded and Embodied Interaction (ACM TEI 2010), MA, USA, 2010 Jan. pp.253-256

As Co-author

9. Chen Ji, H. Nishino, DAYDREAM: A HEALING GAME FOR MITIGATING QUARANTINE-INDUCED NEGATIVE EMOTIONS WITH MUSIC ADVENTURE
The ACM 2020 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY), November 2020, pp 64–67, Ottawa, Canada (online/ due to the coronavirus pandemic), 2020 Nov.
 10. N. Ohata, H. Nishino, A. Takashima & A. Cheok, ANIMAL-HUMAN DIGITAL INTERFACE MEDIATOR : CAN ANIMALS COLLABORATE WITH ARTIFICIAL PRESENCES?
The Animal Computer Interaction Workshop at the Measuring Behaviour Conference, Dublin, Ireland, 2016 May.
 11. Annie On Ni Wan, H. Nishino, & Pamela Pietro, TRE MARIE
The 14th ACM International Conference on Multimedia (ACMMM), Santa Baraba, USA, 2006 OCT.
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Conference Papers (peer-reviewed, poster paper)

As First & Corresponding Author

1. H. Nishino, ARDESTAN: A VISUAL PROGRAMMING LANGUAGE FOR ARDUINO
The ACM Symposium on User Interface Software and Technology (UIST), New Orleans, Louisiana, USA 2019 Oct.
2. H. Nishino, MOSTLY-STRONGLY-TIMED PROGRAMMING
The Third ACM SIGPLAN conference on Systems, Programming, Languages and Applications: Software for Humanity (ACM SPLASH 2012), AZ, USA, 2012 Oct.
3. H. Nishino, HOW CAN A DSL FOR EXPERT END-USERS BE DESIGNED FOR BETTER USABILITY? : A CASE STUDY IN COMPUTER MUSIC
The Work-in-progress Section, The ACM SIGCHI Conference on Human Factors in Computing Systems (ACM SIGCHI 2012), TX, USA, 2012 May.
4. H. Nishino, MISFITS IN ABSTRACTION: TOWARDS USER-CENTERED DESIGN IN DOMAIN-SPECIFIC LANGUAGE FOR END-USER PROGRAMMING
The Second ACM SIGPLAN conference on Systems, Programming, Languages and Applications: Software for Humanity (ACM SPLASH 2011), OR, USA, 2011 Oct.
5. H. Nishino, A SHAPE-FREE DESIGNABLE 6DOF MARKER TRACKING METHOD
The 37th ACM SIGGRAPH International Conference and Exhibition on Computer Graphics and Interactive Techniques (ACM SIGGRAPH 2010), CA, USA, 2010 Jul.
6. H. Nishino, A SPLIT-MARKER TRACKING METHOD BASED ON TOPOLOGICAL REGION ADJACENCY AND GEOMETRICAL INFORMATION FOR INTERACTIVE CARD GAMES
The Second ACM SIGGRAPH Conference in Asia (ACM SIGGRAPH ASIA 2009), Yokohama, Japan, 2009, Dec.
7. H. Nishino, A 2D FIDUCIAL TRACKING METHOD BASED ON TOPOLOGICAL REGION ADJACENCY AND ANGLE INFORMATION
The International Conference on New Interfaces for Musical Expression 2009, PA, USA, 2009 Jun.
8. H. Nishino, MINISYNTH: YET-ANOTHER DOMAIN-SPECIFIC COMPUTER MUSIC SOUND SYNTHESIS LANGUAGE
The ACM SIGPLAN 2008 Conference on Programming Language Design and Implementation (PLDI 2008), AZ, USA, 2008 Jun.
9. H. Nishino, DXRENDERFARM: XGRID BASED RENDERFARM FOR MAYA
The 34th ACM SIGGRAPH International Conference and Exhibition on Computer Graphics and Interactive Techniques (ACM SIGGRAPH 2007), CA, USA, 2007 Aug.

As Corresponding Author

10. Y.N. Jiang & H. Nishino, MEET IN RAIN: A SERIOUS GAME TO HELP THE BETTER APPRECIATION OF CHINESE POEMS
The ACM SIGGRAPH conference, CA, USA, 2019 July.
11. Y.C. Kang, and H. Nishino, SCENTED GRAPHICS: EXPLORATION IN INK-JET SCENTED-PRINTING
ACM SIGGRAPH conference, CA, USA, 2019 July.
12. T.W. Chin, Y.Y. Chuang, Y.L. Fan, Y.N. Jiang, Y.C. Kang, W.H. Kuo, T.W. To, H. Nishino,
PROTOTYPING DIGITAL SIGNAGE SYSTEMS WITH HIGH-LOW TECH INTERFACES
The 10th ACM SIGGRAPH conference and Exhibition on Computer Graphics and Interactive Techniques in Asia (ACM SIGGRAPH ASIA 2017), Bangkok, Thailand, 2017 Nov.

Public Presentation of Computer Music Works and Media-art works (peer-reviewed)

1. American Derivation: Fair Use Portrait (No. 1- No.3) (media art)
INCLUDED IN THE SIGCHI ART.CHI CATALOGUE
The ACM SIGCHI Conference 2016, San Jose, USA
2. Self Portrait of my life (fixed media)
SELECTED FOR CONCERT PRESENTATION (AS THE MOTUS PRIZE WINNER 2008)
Futura 2008, Drôme, France
3. Oberhausen Requiem (site-specific, live computer)
CONCERT PRESENTATION AS A COMPETITION WINNER
MONO@Gasometer competition 2007, Oberhausen, Germany
4. A Very Short Futuristic Sketch (fixed media)
SELECTED FOR CONCERT PRESENTATION
Ai-Maako Festival 2007, Santiago de Chile, Chile
5. Seattle Noise and Pulse Study (live computer)
SELECTED FOR CONCERT PRESENTATION
SuperCollider Symposium 2007², the Hague, the Netherlands
6. Short Drone Study (fixed media)
SELECTED FOR CONCERT PRESENTATION
Santa Fe International Festival of Electroacoustic Music 2007, Santa Fe, NM, USA
7. Self Portrait of My Life (fixed media)
SELECTED FOR AUDIO GALLERY PRESENTATION
WOCMAT conference 2007, Hsinchu, Taiwan
8. Seattle Noise and Pulse Study (live computer)
SELECTED FOR RADIO BROADCASTING
Spark Festival 2007, Minneapolis, MN, USA
9. Seattle Noise and Pulse Study (live computer)
SELECTED FOR CONCERT PRESENTATION
The International Computer Music Conference 2006, Late Night Concert, New Orleans, LA, USA
10. Short Drone Study (fixed media)
SELECTED FOR CONCERT PRESENTATION
Imagine II festival 2006, Memphis, TN, USA
11. Tre Marie (RFID Dance piece with Annie Wan and Pamela Pietro)
SELECTED FOR CONCERT PRESENTATION
The ACM Multimedia Conference, Interactive Arts Program 2006, Santa-Barbara, CA, USA
12. Self Portrait of My Life (fixed media)
SELECTED FOR CONCERT PRESENTATION
Ai-Maako Festival 2006, Santiago de Chile, Chile

²The actual performance was cancelled right on the day of the concert because the sound engineer was afraid of the loud volume required for the presentation.

13. Self Portrait of My Life (fixed media)
Digital Art Weeks 2006, Zurich, Switzerland
SELECTED FOR CONCERT PRESENTATION
14. Self Portrait of My Life (fixed media)
Sonic Channels 2006, New York, NY, USA
SELECTED FOR CONCERT PRESENTATION
15. Minimalism X (live computer)
Maxis Festival 2002, Sheffield, UK
SELECTED FOR CONCERT PRESENTATION
16. Minimalism X (live computer)
Electronic Music Midwest Festival 2002, Kansas City, MO, USA
SELECTED FOR CONCERT PRESENTATION
17. Minimalism X (live computer)
NWEAMO Festival 2002, Portland, OR, USA
SELECTED FOR CONCERT PRESENTATION

Public Presentation of Computer Music and Media-art works (noteworthy)

1. A Very Short Futuristic Sketch (fixed media)
CONCERT PRESENTATION, CURATED BY MR. FRANK NIEHUSMANN
Radio Depot. 2014, Dortmund, Germany
2. Tre Marie (RFID Dance piece with Annie Wan and Pamela Pietro)
CONCERT PRESENTATION
DXArts Concert 2006, Seattle, WA, USA
3. Tre Marie (RFID Dance piece with Annie Wan and Pamela Pietro)
CONCERT PRESENTATION
Dance in Digital Domain 2006, Seattle, WA, USA
4. Minimalism X (the recoding of live computer performance)
CONCERT PRESENTATION, CURATED BY MR. FRANK NIEHUSMANN
Ear Popping Sounds 2003, Dortmund, Germany
5. Untitled (live computer)
CONCERT PRESENTATION
Inter-college Computer Music Concert 2000, Tokyo, Japan
6. Sudden Death (live computer trio, with Shinichiro Toyoda and Hiroki Sasaoka)
CONCERT PRESENTATION
Inter-college Computer Music Concert 2000, Tokyo, Japan

Reviewing

1. The Entertainment Computing Journal 2017 - present
 2. The Sound and Music Computing Conference (SMC) 2019-
 3. The ACM SIGCHI Conference 2013 - present
 4. The ACM Creativity and Cognition Conference 2017
 5. The ACM SIGCHI Interaction Design and Children Conference (IDC) 2016-2017
 6. The Australian Conference on Human-Computer Interaction. (OzChi) 2016-2018
 7. The ACM SIGCHI Conference on Designing Interactive Systems (DIS) 2016-2017
 8. The International Conference for New Interfaces for Musical Expression (NIME) 2016 - present
 9. The NordiChi Conference 2016
 10. The ACM Conference on Tangible, Embedded, and Embodied Interaction (TEI) 2015, 2017
 11. The Japanese Society for Sonic Arts 2014
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Open Source Software

- Ardestan AN INTEGRATED DEVELOPMENT ENVIRONMENT FOR ARDUINO
● **Designed and Developed a New Hybrid (Visual + Textual) Programming Environment for Arduino.**
- DXRenderFarm (discontinued) A XGRID-BASED RENDER FARM SOFTWARE FOR AUTODESK MAYA
● **Designed and Developed the web-based render farm software for distributed rendering in multi-user environment.**
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Other Activities

- Gagaku (Japanese Court Music/Ritual Music) JAPAN
Ryuteki (Gagaku flute) 1997 Dec – present
Studied Ryuteki with Ms.Naoko Miyamaru
Studied Ryuteki and Gagaku ensemble with Master Sukeyasu Shiba