

Romain Michon | Curriculum Vitae

7 avenue Roberto Rossellini, Villeurbanne 69100, France

📱 (+33) (0)7 67 39 72 40 • roman.michon@inria.fr
🌐 <https://ccrma.stanford.edu/~rmichon>

Education

Stanford University – CCRMA	Stanford (USA)
○ <i>Ph.D., Computer-Based Music Theory and Acoustics</i>	2012 – 2018
Thesis: "The Hybrid Mobile Instrument: Recoupling the Haptic, the Physical, and the Virtual"	
Advisors: Julius O. Smith, Chris Chafe, Ge Wang, and Matt Wright	
Graduation date: June 2018	
Université Jean Monnet	Saint-Etienne (France)
○ <i>Master's Degree, GPA 4.0</i>	2009 – 2012
Master's Thesis: "Review on Physical Modeling of Musical Instruments using Digital Waveguides: Implementation, Improvements, Existing Environments and Use" (in French: "Modélisation physique d'instruments de musique par guides d'ondes numériques – enjeux, environnements existants, implémentation, perfectionnements et utilisation")	
Advisor: Laurent Pottier	
Maîtrise's Thesis: "Singing Voice Synthesis using Fonctions d'Ondes Formantiques: Technologies, Existing Tools, Implementation and Use" (in French: "La synthèse de la voix chantée par fonctions d'ondes formantiques: techniques, outils existants, exemple d'implémentation et utilisation")	
Advisor: Laurent Pottier	
Université Jean Monnet	Saint-Etienne (France)
○ <i>Bachelor's Degree, Music and Musicology, GPA 3.8</i>	2006 – 2009
Maynooth University	Maynooth (Ireland)
○ <i>Erasmus Year, Music Technology, GPA 3.9</i>	2008 – 2009
Conservatoire Jules Massenet	Saint-Etienne (France)
○ <i>First Cycle Diploma, Electroacoustic Composition</i>	2006 – 2008
Conservatoire Jules Massenet	Saint-Etienne (France)
○ <i>First Cycle Diploma, Choir Conducting</i>	2006 – 2008
Conservatoire Jules Massenet	Saint-Etienne (France)
○ <i>First Cycle Diploma, Voice and Opera</i>	2006 – 2008
Lycée du Forez	Feurs (France)
○ <i>Baccalauréat (High School Diploma), Science</i>	2003 – 2006
Music School of Feurs	Feurs (France)
○ <i>Third Cycle Diploma, Music Theory</i>	1996 – 2006

Music School of Feurs	Feurs (France)
○ <i>Second Cycle Diploma, Saxophone Performance</i>	1996 – 2005

Work Experience

Faculty Researcher	Lyon, France
○ <i>Inria</i>	October 2021 – Now
Researcher	Lyon, France
○ <i>GRAME – Centre national de création musicale</i>	July 2018 – October 2021
Lecturer & Researcher	Stanford, CA
○ <i>Stanford University</i>	April 2021 – June 2021
Lecturer	Saint-Etienne, France
○ <i>Université Jean Monnet</i>	September 2020 – December 2020
Teaching a one semester course to masters students on <i>Introduction to Computer Music</i> .	
Lecturer	Lyon, France
○ <i>INSA Lyon</i>	September 2020 – November 2020
Teaching a one semester course to masters students on <i>Embedded Systems for Real-Time Audio Signal Processing</i> .	
Lecturer & Researcher	Stanford, CA
○ <i>Stanford University</i>	January 2020 – March 2020
Lecturer	Saint-Etienne, France
○ <i>Université Jean Monnet</i>	September 2019 – December 2019
Teaching a one semester course to masters students on <i>Introduction to Computer Music</i> .	
Visiting Lecturer	Copenhagen, Denmark
○ <i>Aalborg University</i>	October 2019
Teaching a one week course on <i>Digital Signal Processing With Faust</i> to students in Sound and Music Computing (MSc in engineering).	
Visiting Lecturer	Copenhagen, Denmark
○ <i>Aalborg University</i>	May 2019
Teaching a one week course on <i>Low Latency Embedded DSP for New Musical Instruments</i> to students in Sound and Music Computing (MSc in engineering).	
Lecturer & Researcher	Stanford, CA
○ <i>Stanford University</i>	January 2019 – March 2019
Visiting Lecturer	Copenhagen, Denmark
○ <i>Aalborg University</i>	October 2018
Teaching a one week course on <i>Digital Signal Processing in Faust</i> to students in Sound and Music Computing (MSc in engineering).	
Lecturer	Saint-Etienne, France
○ <i>Université Jean Monnet</i>	September 2018 – December 2018
Teaching a one semester course to masters students on <i>Introduction to Computer Music</i> .	

- Research Assistant** **Stanford, CA**
 ○ *Stanford University* *March 2018 – June 2018*
 Research work mostly done in the frame on my Ph.D. dissertation.
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *January 2018 – March 2018*
 Music 250a: “Physical Interaction Design for Music.” Main instructor: Prof. Ge Wang.
- Research Assistant** **Stanford, CA**
 ○ *Stanford University* *September 2017 – December 2017*
 Research work mostly done in the frame on my Ph.D. dissertation.
- Android Audio Consultant** **Paris, France**
 ○ *Antescofo* *June 2017 – September 2017*
 Developing the low-level architecture of the Android version of the Metronaut application.
- Research Assistant** **Stanford, CA**
 ○ *Stanford University* *January 2017 – June 2017*
 Research work mostly done in the frame on my Ph.D. dissertation.
- Primary Instructor** **Stanford, CA**
 ○ *Stanford University* *September 2016 – December 2016*
 Main instructor of Music 256a / CS 476a: “Music, Computing, and Design I: Art of Design for Computer Music” (in replacement of Ge Wang on a sabbatical leave, Teaching Assistant: Tim O’Brien). This class is a requirement for Masters students in Computer-Based Music Theory and Acoustics.
- Primary Instructor** **Stanford, CA**
 ○ *Stanford University* *March 2016 – June 2016*
 Main instructor of Music 280: “TA Training Course.” Orientation to resources at Stanford, guest presentations on the principles of common teaching activities, supervised teaching experience. Teaching assistant (TA) instructors are in charge of the training of the future TA in the music department. This involves teaching a course in Spring quarter and providing year-round support to the TAs. As the lead TA instructor, my job was to design the syllabus of Music 280, teach this class, and train my successor.
- Research Assistant** **Stanford, CA**
 ○ *Stanford University* *July 2015 – June 2016*
 Research work mostly done in the frame on my Ph.D. dissertation.
- Research Assistant** **Stanford, CA**
 ○ *Renault Innovation Silicon Valley / Stanford VAIL* *June 2015 – September 2015*
 I worked on the development of a custom sound engine and sound system for the Stanford driving simulator allowing full 3D audio rendering and where each sound source is synthesized (mostly using physical modeling techniques). This work was conducted in the frame of the project: “Investigating the influence of audible cues on Driver Situational Awareness.”
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *March 2015 – June 2015*
 Music 280: “TA Training Course.” Main instructor: Victoria Chang.
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *March 2015 – June 2015*
 Music 220c: “Research Seminar in Computer Generated Music.” Main instructor: Prof. Chris Chafe.

- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *January 2015 – March 2015*
 Music 256b / CS 476b: "Mobile Music (Music, Computing, and Design II)." Main instructor: Prof. Ge Wang.
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *September 2014 – December 2014*
 Music 250a: "Physical Interaction Design for Music." Main instructor: Sasha Leitman.
- Research Engineer** **Lyon, France**
 ○ *GRAME Centre National de Création Musicale* *July 2014 – September 2014*
 Implementation of an Android architecture for the FAUST programming language in the frame of the ANR FEEVER project (ANR-13-BS02-0008-02).
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *March 2014 – June 2014*
 Music 220c: "Research Seminar in Computer Generated Music." Main instructor: Prof. Chris Chafe.
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *January 2014 – March 2014*
 Music 220b: "Compositional Algorithms, Psychoacoustics, and Spatial Processing." Main instructor: Prof. Ge Wang.
- Teaching Assistant** **Stanford, CA**
 ○ *Stanford University* *September 2013 – December 2013*
 Music 220a: "Fundamentals of Computer-Generated Sound." Main instructor: Prof. Chris Chafe.
- Research Assistant** **Stanford, CA**
 ○ *Stanford University* *July 2013 – August 2013*
 Research assistant at the Center for Computer Research in Music and Acoustics at Stanford University.
- Software Developer** **Saint-Etienne, France**
 ○ *Université Jean Monnet* *May 2012 – July 2012*
 MaxMSP developer at the "culture scientifique, technique et industrielle" department of Université Jean Monnet. I implemented a series of MaxMSP patches with custom objects for an interactive exhibition on "the Physics of Sound."
- Lecturer** **Saint-Etienne, France**
 ○ *Université Jean Monnet* *September 2011 – January 2012*
 Course on: "Introduction to Computer Music with Lilypond."
- Research Engineer** **Lyon, France**
 ○ *GRAME Centre National de Création Musicale* *September 2011 – December 2011*
 Development of a series of online compilation tools for the FAUST programming language in the frame of the ASTREE Project (ANR-08-CORD-003).
- Organizer** **Olmeto, Corsica, France**
 ○ *Scodi Neri Holiday Resort* *June 2011 – September 2011*
 In charge of recreational activities and evening entertainments.
- Visiting Researcher** **Stanford, CA**
 ○ *CCRMA - Stanford University* *December 2010 – April 2011*

I was a visiting researcher at the Center for Computer Research in Music and Acoustics (CCRMA) for one quarter. I worked on a full reimplementation of the Synthesis Tool Kit in the FAUST programming language: the Faust-STK.

Research Engineer

- *Université Jean Monnet*

Saint-Etienne, France

September 2010 – January 2011

I worked on a set of DSP libraries for the FAUST programming language in the frame of the ANR ASTREE project (ANR-08-CORD-003) at the Centre Interdisciplinaire de Recherche sur l'Expression Contemporaine (CIEREC).

Lecturer

- *Université Jean Monnet*

Saint-Etienne, France

September 2010 – December 2010

Course on "Knowledge Certification in Computer Science for Undergraduate Students."

Organizer

- *Scodi Neri Holiday Resort*

Olmeto, Corsica, France

June 2010 – September 2010

In charge of recreational activities and evening entertainments.

Lecturer

- *Université Jean Monnet*

Saint-Etienne, France

September 2009 – December 2009

Course on "Knowledge Certification in Computer Science for Undergraduate Students."

Organizer

- *Camping du Saulou*

Monceau-sur-Dordogne, France

July 2009 – September 2009

In charge of recreational activities and evening entertainments.

Organizer

- *Camping du Saulou*

Monceau-sur-Dordogne, France

July 2008 – September 2008

In charge of recreational activities and evening entertainments.

Choir Director

- *Youth and Culture Center (MJC)*

Saint-Cyr-les-Vignes, France

September 2007 – June 2008

Choir "au Chœur des vignes."

Organizer

- *Camping du Saulou*

Monceau-sur-Dordogne, France

July 2007 – September 2007

In charge of recreational activities and evening entertainments.

Volunteer Experience

President and Founder

- *Electro-M – Université Jean Monnet*

Saint-Etienne, France

September 2010 – September 2012

Electro-M is a non-profit student organization at Jean Monnet University organizing events around computer and electroacoustic music.

Treasurer

- *FAME – Université Jean Monnet*

Saint-Etienne, France

September 2007 – September 2008

The FAME (Fabuleuse Association des Musiciens Etudiants) is in charge of organizing the concerts of the music department of Jean Monnet University.

Languages

- **English:** Native or bilingual proficiency.
- **French:** Native or bilingual proficiency.
- **German:** Elementary proficiency.

Publications

Conferences

- M. Popoff, R. Michon, T. Risset, P. Cochard, S. Letz, Y. Orlarey, and F. de Dinechin, "Audio DSP to FPGA Compilation," in *Proceedings of the 34th IEEE International Conference on Application-specific Systems, Architectures and Processors*, Porto, Portugal, 2023.
- P. Cochard, M. Popoff, A. Fraboulet, T. Risset, S. Letz, and R. Michon, "A Programmable Linux-Based FPGA Platform for Audio DSP," in *Proceedings of the 2023 Sound and Music Computing Conference (SMC-23)*, Stockholm, Sweden, 2023.
- T. Rushton, R. Michon, and S. Letz, "A Microcontroller-Based Network Client Towards Distributed Spatial Audio," in *Proceedings of the 2023 Sound and Music Computing Conference (SMC-23)*, Stockholm, Sweden, 2023.
- R. Michon, J. Bizien, M. Popoff, and T. Risset, "Making Frugal Spatial Audio Systems Using Field-Programmable Gate Arrays," in *Proceedings of the 2023 New Interfaces for Musical Expression (NIME-23)*, Mexico City, Mexico, 2023.
- S. Ren, S. Letz, Y. Orlarey, D. Fober, R. Michon, M. Buffa, and L. Pottier, "Modernized Toolchains to Create JSPatcher Objects and WebAudioModules from Faust Code," in *Proceedings of the 7th International Web Audio Conference*, Cannes, France, 2022.
- S. Letz, R. Michon, Y. Orlarey, "What's New In the Faust Ecosystem and Community?," in *Proceedings of the 2022 International Faust Conference (IFC-22)*, Saint-Étienne, France, 2022.
- M. Popoff, R. Michon, T. Risset, Y. Orlarey, and S. Letz, "Towards an FPGA-based Compilation Flow for Ultra-Low Latency Audio Signal Processing," in *Proceedings of the 19th Sound and Music Computing Conference*, Saint-Étienne, France, 2022.
- R. Michon, C. Dumitrascu, S. Letz, Y. Orlarey, and D. Fober, "The Gramophone: A Programmable DMI to Facilitate the Teaching of STEM Disciplines," in *Proceedings of the Sound and Music Computing Conference (SMC-21)*, Turin, Italy, 2021.
- D. Roosenburg, E. Stine, R. Michon, and J. Chowdhury, "A Wave-Digital Modeling Library for the Faust Programming Language," in *Proceedings of the Sound and Music Computing Conference (SMC-21)*, Turin, Italy, 2021.
- R. Russo, S. Serafin, R. Michon, Y. Orlarey, and S. Letz, "Introducing Finite Difference Schemes Synthesis in Faust: A Cellular Automata Approach," in *Proceedings of the Sound and Music Computing Conference (SMC-21)*, Turin, Italy, 2021.
- R. Michon, C. Dumitrascu, S. Chudet, Y. Orlarey, S. Letz, and D. Fober, "Amstramgrame: Making Scientific Concepts More Tangible Through Music Technology at School," in *Proceedings of the New Interfaces for Musical Expression Conference (NIME-21)*, Shanghai, China, 2021.
- D. Fober, Y. Orlarey, S. Letz, and R. Michon, "A web based environment embedding signal processing

- in musical scores," in *Proceedings of the International Conference on Technologies for Music Notation and Representation (Tenor-21)*, Hamburg, Germany, 2021.
- S. Letz, Y. Orlarey, R. Michon and D. Fober, "Hybridizing Faust and Soul," in *Proceedings of the International Faust Conference (IFC-20)*, Paris, France, 2020.
 - R. Michon, Y. Orlarey, S. Letz, D. Fober and D. Roosenburg, "Embedded Real-Time Audio Signal Processing With Faust," in *Proceedings of the International Faust Conference (IFC-20)*, Paris, France, 2020.
 - Y. Orlarey, S. Letz, D. Fober and R. Michon, "A new Intermediate Representation for Compiling and Optimizing Faust Code," in *Proceedings of the International Faust Conference (IFC-20)*, Paris, France, 2020.
 - T. Risset, R. Michon, Y. Orlarey, S. Letz, G. Müller and A. Gbadamosi, "Faust2FPGA for Ultra-Low Audio Latency: Preliminary Work in The Syfala Project," in *Proceedings of the International Faust Conference (IFC-20)*, Paris, France, 2020.
 - R. Michon, Y. Orlarey, S. Letz. and D. Fober. "The Faust Programming Language As a Platform fro Creating Hybrid Acoustical and Digital Musical Instruments," in *Proceedings of the Forum Acusticum (FA-20)*, Lyon, France, 2020.
 - M. Buffa, J. Lebrun, S. Ren, S. Letz, Y. Orlarey, R. Michon and D. Fober, "Emerging W3C APIs Opened Up Commercial Opportunities for Computer Music Applications," in *Proceedings of the Web Conference 2020*, Taipei, Taiwan, 2020.
 - M. Caren, R. Michon and M. Wright, "The KeyWI: An Expressive and Accessible Electronic Wind Instrument," in *Proceedings of the New Interfaces for Musical Expression Conference (NIME-20)*, Birmingham, UK, 2020.
 - R. Michon, D. Overholt, S. Letz, Y. Orlarey, D. Fober and C. Dumitrascu, "A Faust Architecture for the ESP32 Microcontroller," in *Proceedings of the Sound and Music Computing Conference*, Turin, Italy, 2020.
 - S. Ren, S. Letz, Y. Orlarey, R. Michon, D. Fober, M. Buffa, E. Ammari and J. Lebrun, "Develop WebAudio Plugins in a Web Browser," in *Proceedings of the Web Audio Conference (WAC-19)*, Trondheim, Norway, 2019
 - S. Ren, S. Letz, Y. Orlarey, R. Michon, D. Fober, M. Buffa, E. Ammari and J. Lebrun, "Faust Online IDE: Dynamically Compile and Publish Faust Code as WebAudio Plugins," in *Proceedings of the Web Audio Conference (WAC-19)*, Trondheim, Norway, 2019
 - D. Fober, Y. Orlarey, S. Letz and R. Michon, "A Tree Based Language for Music Score Description," in *Proceedings of the International Symposium on Computer Music Multidisciplinary Research (CMMR-19)*, Marseille, France, 2019
 - R. Michon, Y. Orlarey, S. Letz, D. Fober and C. Dumitrascu "Mobile Music With the Faust Programming Language," in *Proceedings of the International Symposium on Computer Music Multidisciplinary Research (CMMR-19)*, Marseille, France, 2019
 - R. Michon, Y. Orlarey, S. Letz and D. Fober, "Comparison and Implementation of Data Transmission Techniques Through Analog Audio Signals in the Context of Augmented Mobile Instruments," in *Proceedings of the Sound and Music Computing Conference (SMC-19)*, Malaga, Spain, 2019
 - R. Michon, Y. Orlarey, S. Letz and D. Fober, "Real Time Audio Digital Signal Processing With Faust and the Teensy," in *Proceedings of the Sound and Music Computing Conference (SMC-19)*, Malaga,

Spain, 2019

- D. Fober, Y. Orlarey, S. Letz and R. Michon, "Un langage basé sur des arbres pour la description de partitions musicales," in *Proceedings of the Journée de l'Informatique Musicale (JIM-19)*, Bayonne, France, 2019
- J. Leonard, R. Michon, J. Villeneuve, Y. Orlarey and S. Letz, "Formalizing mass-interaction physical modeling in Faust," in *Proceedings of the Linux Audio Conference (LAC-19)*, Stanford University, California, 2019
- N. Gang, S. Sibi, R. Michon, B. Mok, C. Chafe and W. Ju, "Don't Be Alarmed: Sonifying Autonomous Vehicle Perception to Increase Situation Awareness," in *Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications*, Toronto, Canada, 2018.
- J. Granzow, T. Ng, C. Chafe and R. Michon, "Mending Bells and Closing Belfries with Faust," in *Proceedings of the International Faust Conference (IFC-18)*, Mainz, Germany, 2018.
- R. Michon, J.O. Smith, C. Chafe, G. Wang and M. Wright, "The Faust Physical Modeling Library: a Modular Playground for the Digital Luthier," in *Proceedings of the International Faust Conference (IFC-18)*, Mainz, Germany, 2018.
- R. Michon, J.O. Smith, C. Chafe, G. Wang and M. Wright, "faust2smartkeyb: a Tool to Make Mobile Instruments Focusing on Skills Transfer in the Faust Programming Language," in *Proceedings of the International Faust Conference (IFC-18)*, Mainz, Germany, 2018.
- D.B. Cavdir, R. Michon and G. Wang, "The BodyHarp: Designing the Intersection Between the Instrument and the Body," in *Proceedings of the Sound and Music Computing Conference (SMC-18)*, Limassol, Cyprus, 2018.
- S. Serafin, R. Michon and S. Dimitrov, "Blender2faust: From Drawn 3D Objects to Physically Based Sound Models," in *Proceedings of the Sound and Music Computing Conference (SMC-18)*, Limassol, Cyprus, 2018.
- R. Michon, C. Chafe and J. Granzow, "3D Printing and Physical Modeling of Musical Instruments: Casting the Net," in *Proceedings of the Sound and Music Computing Conference (SMC-18)*, Limassol, Cyprus, 2018.
- R. Michon and S. Martin, "Mesh2faust: a Modal Physical Model Generator for the Faust Programming Language – Application to Bell Modeling," in *Proceedings of the International Computer Music Conference (ICMC-17)*, Shanghai, China, 2017.
- Y. Orlarey, S. Letz, D. Fober and R. Michon, "Faust Tutorial for Functional Programmers," in *Proceedings of the 5th ACM SIGPLAN International Workshop on Functional Art, Music, Modeling, and Design (FARM-17)*, Oxford, United-Kingdom, 2017.
- R. Agnihotri, R. Michon and T. O'Brien, "Fundamental Frequency Estimation for Non-Interactive Audio-Visual Simulations," in *Proceedings of the Linux Audio Conference (LAC-17)*, Saint-Etienne, France, 2017.
- P. A. Grumiaux, R. Michon, E. Gallego Arias and P. Jouvelot, "Impulse-Response and CAD-Model-Based Physical Modeling in Faust," in *Proceedings of the Linux Audio Conference (LAC-17)*, Saint-Etienne, France, 2017.
- S. Letz, Y. Orlarey, D. Fober and R. Michon, "Polyphony, sample-accurate control and MIDI support for FAUST DSP using combinable architecture files," in *Proceedings of the Linux Audio Conference*

(LAC-17), Saint-Etienne, France, 2017.

- R. Michon, J. Smith, S. Letz, C. Chafe and Y. Orlarey, "faust2api: a Comprehensive API Generator for Android and iOS," in *Proceedings of the Linux Audio Conference (LAC-17)*, Saint-Etienne, France, 2017.
- R. Michon, J. Smith and Y. Orlarey, "New Signal Processing Libraries for Faust," in *Proceedings of the Linux Audio Conference (LAC-17)*, Saint-Etienne, France, 2017.
- R. Michon, J. O. Smith, M. J. Wright, C. Chafe, J. Granzow and G. Wang, "Passively Augmenting Mobile Devices Towards Hybrid Musical Instrument Design," in *Proceedings of the International Conference on New Interfaces for Musical Expression (NIME-17)*, Copenhagen, Denmark, 2017.
- G. Wang and R. Michon, "FaucK!! Hybridizing the Faust and Chuck Audio Programming Languages," in *Proceedings of the Sound and Music Computing Conference (SMC-16)*, Hamburg, Germany, 2016.
- R. Michon, M. Johns, S. O'Modhrain, N. Gang, N. Gowda, D. Sirkin, C. Chafe, M. Wright and W. Ju, "A Faust Based Driving Simulator Sound Synthesis Engine," in *Proceedings of the Sound and Music Computing Conference (SMC-16)*, Hamburg, Germany, 2016.
- R. Michon, J. O. Smith, C. Chafe, M. Wright and G. Wang, "Nuance: Adding Multi-Touch Force Detection to the iPad," in *Proceedings of the Sound and Music Computing Conference (SMC-16)*, Hamburg, Germany, 2016.
- R. Michon, J. O. Smith, M. Wright and C. Chafe, "Augmenting the iPad: the BladeAxe," in *Proceedings of the International Conference on New Interfaces for Musical Expression (NIME-16)*, Brisbane, Australia, 2016.
- R. Michon, J. O. Smith and Y. Orlarey, "MobileFaust: a Set of Tools to Make Musical Mobile Applications with the Faust Programming Language," in *Proceedings of the International Conference on New Interfaces and Musical Expression (NIME-15)*, Baton Rouge, USA, 2015.
- C. Wu, N. Weitzner, Y. H. Yeh, J. Abel, R. Michon and M. Wright, "Tibetan Singing Prayer Wheel: A Hybrid MusicalSpiritual Instrument Using Gestural Control," in *Proceedings of the International Conference on New Interfaces and Musical Expression (NIME-15)*, Baton Rouge, USA, 2015.
- R. Michon and J. O. Smith, "A Hybrid Guitar Physical Model Controller: The BladeAxe," in *Proceedings of ICMC-SMC 2014*, Athens, Greece, 2014.
- R. Michon, "Mephisto: an Open Source WIFI OSC Controller for Faust Applications," in *Proceedings of the 12th Linux Audio Conference (LAC-14)*, ZKM, Karlsruhe, Germany, May 1-4, 2014.
- R. Michon, "Faust2android: a Faust Architecture for Android," in *Proceedings of the 16th International Conference on Digital Audio Effects (DAFx-2013)*, National University of Ireland, Maynooth, Ireland, Sept. 2-5, 2013.
- R. Michon, "Faust2android: une architecture Faust pour Android," in *Proceedings of the 19th Journées de l'Informatique Musicale (JIM-13)*, Université Paris 8, Paris, France, May 13-15, 2013.
- R. Michon, M. Borins and D. Meisenholder "The Black Box," in *Proceedings of the 13th International Conference for Musical Expression (NIME-13)*, KAIST, Daejon and Seoul, Korea Republic, May 27-30, 2013.
- R. Michon, Modélisation physique d'instruments de musique par guides d'ondes numériques – enjeux, environnements existants, implémentation, perfectionnements et utilisation, Master Thesis, Université Jean Monnet, Saint-Etienne, France, 2012.

- R. Michon and Y. Orlarey, "Le compilateur en ligne de Faust : un IDE en ligne pour le langage de programmation Faust," in *Proceedings of the 18th Journées de l'Informatique Musicale (JIM-12)*, Mons, Belgium, May 9-11, 2012.
- R. Michon and Y. Orlarey, "The Faust Online Compiler: a Web-Based IDE for the Faust Programming Language," in *Proceedings of the 10th Linux Audio Conference (LAC-12)*, Stanford University, CA, April 12-15, 2012.
- R. Michon and J. O. Smith, "Faust-STK : a Set of Linear and Nonlinear Physical Models for the Faust Programming Language," in *Proceedings of the 14th International Conference on Digital Audio Effects (DAFx-11)*, Paris, France, September 19-23, 2011.
- J. O. Smith and R. Michon, "Nonlinear Allpass Ladder Filters in FAUST," in *Proceedings of the 14th International Conference on Digital Audio Effects (DAFx-11)*, Paris, France, September 19-23, 2011.
- R. Michon, "Faust-STK : une Bibliothèque de Modèles Physiques pour le langage FAUST," in *Proceedings of the 17th Journées de l'Informatique Musicale (JIM-11)*, Saint-Etienne, France, May 25-27, 2011.
- J. Bresson and R. Michon, "Implémentation et contrôle du Synthétiseur Chant dans OpenMusic," in *Proceedings of the 17th Journées de l'Informatique Musicale (JIM-11)*, Saint-Etienne, France, May 25-27, 2011.
- R. Michon, La Synthèse de la Voix Chantée par Fonctions d'Ondes Formantiques – Techniques, Outils Existant, Exemple d'Implémentation et Utilisation, Master Thesis, Université Jean Monnet, Saint-Etienne, France, 2010.

Journals.....

- M. Kolar, L. Valentin, P. Svensson, S. Martin, J. S. Abel, R. Michon, C. Fritz, G. Tosello, J. Chowning, and M. Wright, "From room acoustics to paleoacoustics: A preliminary acoustical study in Chauvet Cave," *The Journal of the Acoustical Society of America*, 152(4), 2022.
- F. Schroeder and R. Michon. *Accessibility of Musical Expression: Co-Edited Journal with Selected Papers of NIME-20*, Computer Music Journal: MIT Press, 44(2), 2021.
- S. Ren, S. Letz, Y. Orlarey, R. Michon, D. Foher, M. Buffa, and J. Lebrun, "Using Faust DSL to Develop Custom, Sample Accurate DSP Code and Audio Plugins for the Web Browser," *Journal of the Audio Engineering Society*, 68(10), 2020.
- R. Michon, "Quatre années de workshop Faust," *Techniques et méthodes innovantes pour l'enseignement de la musique et du traitement de signal*, Revue Francophone Informatique et Musique, 1(6), 2018.
- R. Michon, J.O. Smith, M. Wright, C. Chafe, J. Granzow et G. Wang, "Mobile Music, Sensors, Physical Modeling, and Digital Fabrication: Articulating the Augmented Mobile Instrument," *Applied Sciences*, 7(12), 1311, 2017.
- R. Michon et J. Granzow, "Predicting the Acoustical Properties of 3d Printed Resonators Using a Matrix of Impulse Responses and Mode Interpolation," *Journal of the Acoustical Society of America*, 2016, 139:4.

Conference Proceedings.....

- R. Michon, L. Pottier, and Y. Orlarey, *Proceedings of the 19th Sound and Music Computing Conference*, Saint-Étienne, France, 2022.
- F. Schroeder and R. Michon, *Proceedings of the 2020 New Interfaces for Musical Expression*,

Birmingham, UK, 2020.

- R. Michon and F. Lopez-Lezcano, *Proceedings of the 17th Linux Audio Conference*, Stanford University, USA, 2019.
- R. Michon and A. Gräf, *Proceedings of the 1st International Faust Conference*, Mainz, Germany, 2018.

Book Chapters

- R. Michon, "Three Years of Faust Workshops," *Innovative Tools and Methods for Teaching Music and Signal Processing*. Laurent Pottier. Paris : Presses des Mines, 2017, 179-186.

Awards

- **SMC-19 Best Presentation Award.** Paper: R. Michon, Y. Orlarey, S. Letz and D. Fober, "Real Time Audio Digital Signal Processing With Faust and the Teensy," 2019 Sound and Music Computing Conference (SMC-19), Malaga, Spain.
- **SMC-18 Best Student Paper Award.** Paper: D.B. Cavdir, R. Michon and G. Wang, "The BodyHarp: Designing the Intersection Between the Instrument and the Body," 2018 Sound and Music Computing Conference (SMC-18), Limassol, Cyprus.
- **NIME-16 Best Paper Award.** Paper: R. Michon, J. O. Smith, M. J. Wright, C. Chafe, J. Granzow and G. Wang, "Passively Augmenting Mobile Devices Towards Hybrid Musical Instrument Design," 2016 New Interfaces for Musical Expression Conference (NIME-16), Copenhagen, Denmark.
- **2011 First National Award of the Scientific and Technical Culture** (Premier Prix National de la Culture Scientifique et Technique) with the Electro-M association for: "Interactive Installations of the Computer Music Days 2011" (Installations Interactives des Journées de l'Informatique Musicale 2011).
- **2011 AFIM Young Researcher Award** (Prix AFIM du Jeune Chercheur 2011). Paper: R. Michon, "Faust-STK : une Bibliothèque de Modèles Physiques pour le langage FAUST," Computer Music Days 2011 (Journées de l'Informatique Musicale 2011), Saint-Etienne, France.

Selected Talks

- **February 2021.** *Introduction to the Faust Physical Modeling Toolkit*. Invited talk, Faust Physical Modeling Workshop, Online Event.
- **December 2020.** *Tech-nologies et outils émergents pour la création musicale et sonore*. Invited talk, Oblic, Le Damier, Clermont-Ferrand, France, Online Event.
- **December 2020.** *Building and Using the Grame Gramophone*. Invited talk, Programmable Audio Workshop (PAW-20), Online Event.
- **July 2020.** *Physical Modeling, Digital Fabrication, and the Faust Programming Language: Towards a Toolkit for Hybrid Luthiery*. Invited talk, Journée GTAS, Online Event.
- **November 2019.** *Embedded Real-Time Audio DSP With the Faust Programming Language*. Invited colloquium speaker, The University of Edinburgh, UK.
- **June 2019.** *Faust: introduction, outils et pistes de recherche*. Invited keynote speaker (conférence plénière), Journées Jeune Chercheurs en Audition, Acoustique Musicale et Signal audio (JJCAAS-19),

Le Mans, France.

- **March 2019.** *What's New With Faust?*. CCRMA 2019 Open House, CCRMA, Stanford University, USA.
- **February 2019.** *Real-Time Audio Digital Signal Processing With Faust and the Teensy (and More)*. CCRMA Colloquium, Stanford University, USA.
- **April 2018.** *Physical Modeling of Musical Instruments in Faust*. Invited lecture, Aalborg University, Copenhagen, Denmark.
- **April 2018.** *Music Creation and Technology*. Invited talk (with S. Serafin), Relevance Festival, Copenhagen, Denmark.
- **April 2018.** *The Hybrid Mobile Instrument: Combining Lutherie, 3D Printing, Sensors, Digital Signal Processing, and Mobile Devices*. Invited talk, Copenhagen NextM, Copenhagen, Denmark.
- **March 2018.** *The Hybrid Mobile Instrument: Combining Lutherie, 3D Printing, Sensors, Digital Signal Processing, and Mobile Devices*. Guest talk, STEMcast18, Nueva High School, San Mateo, USA.
- **March 2018.** *Faust and Its Ecosystem: an Introduction to the Faust Programming Language and Its Accompanying Tools*. Guest talk with Yann Orlarey, Facebook, Menlo Park, USA.
- **March 2018.** *faust2smartkeyb: Designing Mobile Device Based Musical Instruments With Faust // The Faust Physical Modeling Toolkit*. CCRMA 2018 Open House, CCRMA, Stanford University, USA.
- **February 2018.** *The Hybrid Mobile Instrument: Shredding on Smart-Devices*. Invited talk, Nerd Nite SF, San Francisco, USA.
- **December 2017.** *Mobile Music, Sensors, Physical Modeling, and Digital Fabrication: Articulating the Hybrid Mobile Instrument*. Guest talk, HP, Palo Alto, USA.
- **December 2017.** *Mobile Music, Sensors, Physical Modeling, and Digital Fabrication: Articulating the Hybrid Mobile Instrument*. Guest lecture, University of Miami, Miami, USA.
- **May 2017.** *New Tools for Mobile Development and Physical Modeling of Musical Instruments in the Faust Programming Language*. Guest lecture, Leibniz-Institut für Europäische Geschichte, Johannes Gutenberg University, Mainz, Germany.
- **April 2017.** *Control of Musical Instrument Physical Models: Gesture First!*. Guest lecture at UCSB, Santa Barbara, USA.
- **March 2017.** *Faust Foundry: a Software Kit to Make Bell Physical Models for Musical Applications*. Invited speaker to the 2017 Campanology Symposium, University of Michigan, Ann Arbor, USA.
- **March 2017.** *Making Musical Mobile Apps With Faust and the Smartkeyboard App Generator*. CCRMA Colloquium, Stanford University, USA.
- **November 2016.** *Smartphones, Fabrication numérique et augmentation passive : vers une lutherie hybride*. Invited speaker to the symposium on les 3èmes dimensions des espaces musicaux, Maison des Mathématiques et de l'Informatique, Lyon, France.
- **May 2016.** *Faust Based Research, Teaching and Applications at Stanford University*. Invited colloquium speaker, Centre de Recherche en Informatique, MINES ParisTech, Fontainebleau, France.
- **May 2016.** *Faust Based Research, Teaching and Applications at Stanford University*. Invited

colloquium speaker, GRAME-CNCM, Lyon, France.

- **March 2016.** *Passive Mobile Device Augmentation: Designing Mobile Phone Based Hybrid Musical Instruments.* CCRMA Colloquium, Stanford University, USA.
- **March 2016.** *From physical modeling and <: FAUST :> to GeoShred.* Invited speaker to the Tel Aviv Music Technology Meet-Up, Tel Aviv, Israel.
- **February 2016.** *Augmenting Mobile Devices.* CCRMA Colloquium, Stanford University, USA.
- **January 2016.** *A Faust Based Audio Engine for the Stanford Driving Simulator.* CCRMA Colloquium, Stanford University, USA.
- **November 2015.** *Three years of Faust workshops - Teaching a one week intensive signal processing course to large groups of students with very various background.* Invited speaker to the symposium on Des outils et des méthodes innovantes pour l'enseignement de la musique et du traitement du signal, Université Jean Monnet, Saint-Etienne, France.
- **April 2015.** Keynote: *Emerging Technologies for Musical Audio Synthesis and Effects.* Invited keynote speaker (in replacement of Julius O. Smith) to the 2015 Linux Audio Conference, Johannes Gutenberg University, Mainz, Germany.
- **October 2015.** *The BladeAxe.* Invited speaker to the Norwegian Music Technology Meet-Up, Tromsø, Norway.
- **January 2015.** *Faust and Mobile Platforms.* CCRMA Colloquium, Stanford University, USA.
- **October 2014.** *What Might the Future Hold?.* Panel discussion with Julius O. Smith, Sasha Leitman, Takako Fujioka and Ge Wang, Triple CCRMAlite Festival, Stanford University, USA.
- **December 2013.** *The Faust Synthesis Toolkit: A set of linear and nonlinear physical models for the Faust programming language.* Invited speaker to the 166th Meeting of the Acoustical Society of America, San Francisco, USA.
- **September 2013.** Radio Podcast. L'atelier de la Création - France Culture: *Musique et Technologie: les Pionniers de l'Electro.*
- **June 2012.** *The Faust Online Compiler: a Web-Based IDE for the Faust Programming Language.* Workshop "Le Web des Fonctions", GRAME, Lyon, France.
- **February 2012.** *Le compilateur en ligne de FAUST : un IDE en ligne pour le langage de programmation Faust.* Workshop "Enjeux des technologies WEB pour les applications Audionumériques", Université Jean Monnet, Saint-Etienne, France.
- **May 2011.** *Waveguide Physical Modeling of Musical Instruments in the Faust Programming Language.* Music Department, Université Jean Monnet, Saint-Etienne, France.
- **April 2011.** *A set of Linear and Nonlinear Physical Models for the Faust Programming Language.* Music Technology Group, Universitat Pompeu Fabra, Barcelona, Spain.
- **February 2011.** *The Faust Synthesis ToolKit.* Center for Computer Research in Music and Acoustics, Stanford University, United-States.
- **November 2010.** *Chant-lib, une bibliothèque de CHANT pour OpenMusic.* Institut de Recherche et Coordination Acoustique/Musique (IRCAM), Paris, France.

Recent Concerts/Performances

- **July 2018.** *Méridiens*. One week residency followed by a concert. Lagorce, Ardèche, France.
- **October 2016.** *Je Marche the Line*. Piece for BladeAxe and voice. CCRMA Transitions Concert 2016, Stanford, USA.
- **July 2016.** *A Minor Chord for Blade Axe*. Piece for BladeAxe and tenor. 2016 New Interfaces for Musical Expression Conference, Queensland Conservatory, Australia.
- **April 2016.** *A Minor Chord for Blade Axe*. Piece for BladeAxe and tenor. California Electronic Music Exchange, UC Santa Barbara, USA.
- **November 2015.** *A Minor Chord for Blade Axe*. Piece for BladeAxe and tenor. Meridian Composers in Performance Series, Canessa Gallery, San Francisco, USA.
- **October 2015.** *A Minor Chord for Blade Axe*. Piece for BladeAxe and tenor. CCRMA Transitions Concert 2015, Stanford, USA.
- **July 2014.** *Fu Yen!*. Piece for laptop orchestra. Stanford Center at Peking University, Beijing, China.
- **December 2013.** *Toast and Jam*. Piece for analog synthesizers and SuperCollider patch. CCRMA Fall Concert 2013, Bing Concert Hall, Stanford University, USA.
- **May 2013.** *Bruits pour Chanforgnophone*. Piece for chanforgnophone and tenor. CCRMA Spring Concert 2013, Bing Concert Hall, Stanford University, USA.
- **March 2013.** *Study for Chanforgnophone*. Piece for chanforgnophone and tenor. CCRMA Winter Concert 2013, Stanford University, USA.
- **December 2012.** *Study for Feraillophone*. Piece for feraillophone and tenor. CCRMA Fall Concert 2012, Stanford University, USA.

Teaching

- **2021 Music 250a: Physical Interaction Design for Music**
Role: Main Instructor
Level: Undergraduate/Graduate
Spring 2021 – CCRMA, Stanford University, California
- **2020 Introduction to Computer Music Course**
Role: Main Instructor
Level: Graduate
Fall 2020 – Jean Monnet University, Saint-Etienne, France
- **Embedded Systems for Real-Time Audio Processing**
Role: Main Instructor (With Tanguy Risset)
Level: Graduate
Fall 2020 – INSA Lyon, Lyon, France
- **2020 Music 250a: Physical Interaction Design for Music**
Role: Main Instructor
Level: Undergraduate/Graduate
Winter 2020 – CCRMA, Stanford University, California
- **2019 Digital Signal Processing in Faust Workshop**

- Role: Main Instructor
Level: Graduate
October 2019 – Aalborg University, Copenhagen, Denmark
- **2019 Embedded DSP With Faust Workshop**
Role: Main Instructor (co-teaching with John Granzow)
July 2019 – CCRMA, Stanford University, California
 - **Low Latency Embedded DSP for New Musical Instruments**
Role: Main Instructor
Level: Graduate
May 2019 – Aalborg University, Copenhagen, Denmark
 - **2019 Music 250a: Physical Interaction Design for Music**
Role: Main Instructor
Level: Undergraduate/Graduate
Winter 2019 – CCRMA, Stanford University, California
 - **Introduction to Computer Music Course**
Role: Main Instructor
Level: Graduate
Fall 2018 – Jean Monnet University, Saint-Etienne, France
 - **2018 Digital Signal Processing in Faust Workshop**
Role: Main Instructor
Level: Graduate
October 2018 – Aalborg University, Copenhagen, Denmark
 - **2018 Augmented Smartphone Workshop**
Role: Main Instructor
Level: Graduate
April 2018 – Aalborg University, Copenhagen, Denmark
 - **Online Course: Real-Time Audio Signal Processing in Faust**
Role: Instructor (co-teaching with Yann Orlarey, Chris Chafe, and Julius Smith)
Available in Summer 2018 – Stanford Course on the Kadenze Online Platform (<https://www.kadenze.com>)
 - **2018 Music 250a: Physical Interaction Design for Music**
Role: Teaching Assistant (main instructor: Prof. Ge Wang)
Level: Undergraduate/Graduate
Winter 2018 – CCRMA, Stanford University, California
 - **2018 Mobile App Development With Faust Workshop**
Role: Main Instructor (co-teaching with Yann Orlarey)
March 2018 – Monterey Coast Preparatory, Scotts Valley, California
 - **2018 Faust and Furious Workshop**
Role: Main Instructor (co-teaching with Yann Orlarey)
January 2018 – CCRMA, Stanford University, California
 - **2017 Miami Faust Programming Language Workshop**
Role: Main Instructor
Level: Graduate

December 2017 – University of Miami, Florida

- **2017 Mobile Synth Workshop Series**

Role: Main Instructor (co-teaching with John Granzow)
June 2017 – CCRMA, Stanford University, California

- **2017 CCRMA Faust Day**

Role: Main Instructor
April 2017 – CCRMA, Stanford University, California

- **2017 Augmented Smartphone Workshop**

Role: Main Instructor
March 2017 – Aalborg University, Copenhagen, Denmark

- **2016 Music 256a / CS 476a: Music, Computing, and Design I: Art of Design for Computer Music**

Role: Main Instructor (replacing Ge Wang on sabbatical)
Level: Graduate
Fall 2016 – CCRMA, Stanford University, California

- **2016 CCRMA Stompbox Summer Workshop**

Role: Main Instructor (co-teaching with Esteban Maestre)
July 2016 – CCRMA, Stanford University, California

- **2016 CCRMA Composed Instrument Summer Workshop**

Role: Main Instructor (co-teaching with John Granzow)
July 2016 – CCRMA, Stanford University, California

- **2016 CCRMA Audio Plug-ins Designed with Faust Summer Workshop**

Role: Main Instructor
July 2016 – CCRMA, Stanford University, California

- **2016 Stanford Music Department TA Training**

Role: Main Instructor (assistant: Kara Riopelle)
Level: Graduate
Spring 2016 – Stanford University, California

- **2016 CCRMA Faust Day**

Role: Main Instructor
February 2016 – CCRMA, Stanford University, California

- **2015 CCRMA Audio Plug-ins Designed with Faust Summer Workshop**

Role: Main Instructor
July 2015 – CCRMA, Stanford University, California

- **2015 CCRMA Audio Plug-ins Designed with Faust Summer Workshop - Online Course Version**

Role: Main Instructor
July 2015 – CCRMA, Stanford University, California

- **2015 Stanford Music Department TA Training**

Role: Assistant Instructor (main instructor: Victoria Chang)
Level: Graduate
Spring 2015 – Stanford University, California

- **2015 Music 220c: Research Seminar in Computer Generated Music**
Role: Teaching Assistant (main instructor: Prof. Chris Chafe)
Level: Undergraduate/Graduate
Spring 2015 – CCRMA, Stanford University, California
- **2015 CCRMA Faust Day**
Role: Main Instructor
January 2015 – CCRMA, Stanford University, California
- **2015 Music 256b / CS 476b: Mobile Music (Music, Computing, and Design II)**
Role: Teaching Assistant (main instructor: Prof. Ge Wang)
Level: Graduate
Winter 2015 – CCRMA, Stanford University, California
- **Audio Plug-ins Designed with Faust Workshop - Festival de Audio y Acústica Costarricense**
Role: Main Instructor
September 2014 – San Jose, Costa Rica
- **2015 Music 250a: Physical Interaction Design for Music**
Role: Teaching Assistant (main instructor: Sasha Leitman)
Level: Undergraduate/Graduate
Fall 2014 – CCRMA, Stanford University, California
- **2014 CCRMA Audio Plug-ins Designed with Faust Summer Workshop**
Role: Main Instructor
July 2014 – CCRMA, Stanford University, California
- **2014 Music 220c: Research Seminar in Computer Generated Music**
Role: Teaching Assistant (main instructor: Prof. Chris Chafe)
Level: Undergraduate/Graduate
Spring 2014 – CCRMA, Stanford University, California
- **2014 Music 220b: Compositional Algorithms, Psychoacoustics, and Spatial Processing**
Role: Teaching Assistant (main instructor: Prof. Ge Wang)
Level: Undergraduate/Graduate
Winter 2014 – CCRMA, Stanford University, California
- **2013 Music 220a: Fundamentals of Computer-Generated Sound**
Role: Teaching Assistant (main instructor: Prof. Chris Chafe)
Level: Undergraduate/Graduate
Fall 2013 – CCRMA, Stanford University, California
- **2013 CCRMA Faust Day**
Role: Main Instructor
January 2013 – CCRMA, Stanford University, California
- **Introduction to Computer Music with Lilypond**
Role: Main Instructor
Level: Undergraduate
Fall 2011 – Université Jean Monnet, Saint-Etienne, France
- **Knowledge Certification in Computer Science for Undergraduate Students**
Role: Main Instructor
Level: Undergraduate

Fall 2010 – Université Jean Monnet, Saint-Etienne, France

○ **Knowledge Certification in Computer Science for Undergraduate Students**

Role: Main Instructor

Level: Undergraduate

Fall 2009 – Université Jean Monnet, Saint-Etienne, France

Other Academic Activities

Year-Round Position.....

○ **Sound and Music Computing Network/Conference**

Role: Summer School Chair (Board Member)

○ **International Faust Conference (IFC)**

Role: Board Member

Punctual Positions.....

○ **2022 Sound and Music Computing Conference (SMC-22)**

Role: Chair/Conference Organizer

○ **2021 Sound and Music Computing Conference (SMC-21)**

Role: PC Member

○ **2021 New Interfaces for Musical Expression Conference (NIME-21)**

Role: PC Member

○ **2020 New Interfaces for Musical Expression Conference (NIME-20)**

Role: Paper Chair

○ **2020 Forum Acusticum (FA-20)**

Role: PC Member

○ **2020 International Faust Conference (IFC-20)**

Role: PC Member

○ **2020 Linux Audio Conference (LAC-20)**

Role: PC Member

○ **2020 Sound and Music Computing Conference (SMC-20)**

Role: PC Member

○ **2019 Sound and Music Computing Conference (SMC-19)**

Role: Summer School Chair

○ **2019 Linux Audio Conference**

Role: Chair/Conference Organizer

○ **Programmable Audio Workshop (PAW)**

Role: Co-Organizer

○ Special issue of **Multimodal Technologies and Interaction** (journal) on *Sonic Interaction for Diversity*

Role: Guest Editor with S. Serafin and C. Erkut

○ Special issue of **Wireless Communications and Mobile Computing** (journal) on *Interactions in Mobile Sound and Music Computing*

Role: Reviewer

- **2018 International Faust Conference**

Role: Paper Chair

- **2018 Faust Award**

Role: Member of the jury

- **2018 ACM Symposium on Spatial User Interaction (SUI-18)**

Role: Program Committee Member

- **2018 New Interfaces for Musical Expression Conference (NIME-18)**

Role: Reviewer

- **2018 Linux Audio Conference (LAC-18)**

Role: Reviewer

- **2018 Sound and Music Computing Conference (SMC-18)**

Role: Reviewer

- **2017 Linux Audio Conference (LAC-17)**

Role: Reviewer

- **2017 Sound and Music Computing Conference (SMC-17)**

Role: Reviewer

- **2016 Faust Award**

Role: Member of the jury

- **2016 Sound and Music Computing Conference (SMC-16)**

Role: Reviewer

- **2015 Linux Audio Conference (LAC-15)**

Role: Reviewer

- **2014/2015 CCRMA Colloquium Series**

Role: Co-Organizer (with Madeline Huberth)

Selected Skills

Computer Science

Programming Languages: C++, C, Objective-C, Swift, JAVA, Python, Assembly, Common Lisp, Bash, Perl

Development: OSX, Linux, Windows, Android, iOS

Web: HTML, JavaScript, PHP, mySQL, Ruby, Django, FLASH, Photoshop, Illustrator, GIMP, Inkscape

Selected Frameworks: OpenGL, Qt, GTK, JUCE, OpenFrameworks, UnrealEngine, CoreAudio, ALSA, JACK

Other: FPGA, Software Architecture, Audio Engine Architecture, Embedded Systems, Networks

Electrical Engineering

Matlab, Octave, Digital Signal Processing, Physical Modeling, Electronics/Circuit Design, Fixed Point DSP Chips Programming, Analog Synthesizers

Mechanical Engineering/Product Design

CAD/CAM: SolidWorks, HSMWorks, OpenScad, Blender

Fabrication Techniques: Milling/Lathe, CNC Machining, Injection Molding, Wood Working, Welding, Silicone Molding

Prototyping: 3D Printing, Laser Cutting, Micro-Controllers, Sensors

Other: HCI, Design Thinking

Computer Music

Environments/Languages: FAUST, ChucK, PureData, CSOUND, Ardour, SuperCollider, Modalys

Techniques: Sound Synthesis and Processing, Sound Design, Spatial Audio, Audio Perception

Other: OpenMusic, Finale, Lylipond

Music

Sound Engineering: Recording, Mixing Mastering, Production (Logic, Cubase, ProTools, etc.)

Performance: Saxophone, Piano, Tenor Singing, Choir Conducting

Other: Musicology, Harmony, Analysis, Counterpoint, Theory

Other

Latex, Microsoft Office, Teaching, Management, Public Speaking, etc.

Extracurricular Activities

I love sport and nature, so I try to go backpacking or hiking whenever I have free time.

I run, swim, and bike almost everyday.

I've been singing in various vocal ensembles for the past ten years.

More Information

More information can be found on my personal website:

<https://ccrrma.stanford.edu/~rmichon>

or on my Linkedin profile:

<https://linkedin.com/in/romain-michon-7744a4111>