

## Curriculum Vitae

### Martha E. Thomae Elías

[martha.thomaeelias@mail.mcgill.ca](mailto:martha.thomaeelias@mail.mcgill.ca)

Montréal, QC, Canada

## Education

2017–present: McGill University, Montréal, Canada.

*PhD candidate in Music Technology (all but dissertation)*. Dissertation on “Guatemalan Cathedral Choirbook 1: From Manuscript to Digital Images to Symbolic Editorial Scores” supervised by Prof. Ichiro Fujinaga and Prof. Julie Cumming.

2015–2017: McGill University, Montréal, Canada.

*M.A. in Music Technology*. Thesis on “[Automatic Scoring Up of Mensural Music Using Perfect Mensurations, 1300–1550](#)” supervised by Prof. Ichiro Fujinaga and Prof. Julie E. Cumming.

2013: Universidad del Valle de Guatemala, Guatemala City, Guatemala.

*B.S. in Mathematics*

2012: Universidad Francisco Marroquín, Guatemala City, Guatemala.

*Diploma in Art History: Medieval and Islamic Art*

## Academic Experience

2015–present	Research Assistant, “Single Interface for Music Score Searching and Analysis” Project. Department of Music Research, Schulich School of Music, McGill University.
Fall 2020	Co-lecturer, “MUMT 301: Music & the Internet.” McGill University.
Fall 2018	Teaching Assistant, “MUMT 306: Music & Audio Computing I.” McGill University.
Winter 2018	Teaching Assistant, “MUAR 211: The Art of Listening.” McGill University.
Fall 2017	Teaching Assistant, “MUMT 202: Fundamentals of New Media.” McGill University.
First term, 2014	Teaching Assistant, “Mathematical Models 1.” Universidad del Valle de Guatemala.
First term, 2011	Grader, “Complementary Subjects in Mathematics” (basic contents: partial differential equations and complex functions). Universidad del Valle de Guatemala.
First term, 2009	Grader, “Linear Algebra 1” and “Physics 2.” Universidad del Valle de Guatemala. Teaching Assistant, “Physics 2 – Laboratory.” Universidad del Valle de Guatemala.
Second term, 2008	Grader, “Physics 1.” Universidad del Valle de Guatemala.

## Publications

- Chapter** Thomae, Martha E. “The Guatemalan Choirbooks: Facilitating Preservation, Performance, and Study of the Colonial Repertoire.” In *Christian Sacred Music in the Americas*, edited by Andrew Shenton and Joanna Smolko. New York, Rowman & Littlefield, 2021.
- Poster** Desmond, Karen, Andrew Hankinson, Laurent Pugin, Juliette Regimbal, Craig Sapp, and Martha E. Thomae. “Next Steps for Measuring Polyphony: A Prototype Editor for Encoding Mensural Music.” In *Proceedings of the Music Encoding Conference*, 121–24. Tufts University, Boston, MA: Humanities Commons, 2020. <http://dx.doi.org/10.17613/5k88-9z02>.
- Paper** Thomae, Martha E., Antonio Ríos-Vila, Jorge Calvo-Zaragoza, David Rizo, and José M. Iñesta. “Retrieving Music Semantics from Optical Music Recognition by Machine Translation.” In *Proceedings of the Music Encoding Conference*, 19–24. Tufts University, Boston, MA: Humanities Commons, 2020. <http://dx.doi.org/10.17613/605z-nt78>.
- Paper** Thomae, Martha E., Julie E. Cumming, and Ichiro Fujinaga. “The Mensural Scoring-Up Tool.” In *Proceedings of the 6th International Workshop on Digital Libraries for Musicology*, 9–19. The Hague, NL: ACM, 2019. <https://doi.org/10.1145/3358664.3358668>.

## Invited Talks / Conference Presentations

- 2021 “Digital Infrastructures for Mensural Music Using MEI.” Invited lecture for the Kolloquium Musikwissenschaft, Freiburger Forschungs- und Lehrzentrum Musik (FZM), Freiburg, Germany. January 26<sup>th</sup>.
- “Encoding Mensural Notation with MEI.” Invited lecture for Paleography course, University of Freiburg, Freiburg, Germany. January 25<sup>th</sup>.
- 2020 “Workshop II: Hands-on MEI Encoding.” Invited shared lecture and hackathon for the Digital Humanities in Early Music Research I Series – Session II: Early Music Databases and Encoding, Prague (online). June 30<sup>th</sup>.
- “Workshop I: Introduction to MEI.” Invited shared lecture for the Digital Humanities in Early Music Research I Series – Session II: Early Music Databases and Encoding, Prague (online). June 24<sup>th</sup>.
- “MEI for Encoding Mensural Music – A Survey.” Invited lecture for the Digital Humanities in Early Music Research I Series – Session II: Early Music Databases and Encoding, Prague (online). June 22<sup>nd</sup>.
- “Retrieving Music Semantics from Optical Music Recognition by Machine Translation.” Presented at the Music Encoding Conference, Tufts University, Boston, MA (online). May 27<sup>th</sup>. (*Refereed*)
- 2019 “Digitization and Encoding of the Musical Contents of a Set of Guatemalan Choirbooks.” Invited lecture for Multimedia Systems (GLIS 633) course, McGill University, Montréal, Québec, Canada. November 27<sup>th</sup>.
- “The Mensural Scoring-up Tool.” Presented at the Digital Libraries for Musicology, National Library of The Netherlands, The Hague, The Netherlands. November 9<sup>th</sup>. (*Refereed*)

- “OMR for Mensural Notation: Looking at a Guatemalan Music Manuscript.” Presented at the SIMSSA Workshop XIX, CIRMMT, McGill University, Montréal, Québec, Canada. September 21<sup>st</sup>.
- “Taking Digital Humanities to Guatemala, a Case Study in the Preservation of Colonial Musical Heritage.” Presented at the Digital Humanities Conference, Tivoli Vredenburg, Utrecht, The Netherlands. July 10<sup>th</sup>. (*Refereed*)
- “Guatemalan Manuscripts: Digitization Issues and Future Challenges in the Adaption of the OMR Workflow for Mensural Music.” Presented at the SIMSSA Workshop XVIII, Department of Musicology, University of Vienna, Vienna, Austria. June 2<sup>nd</sup>.
- “Application of Music-Encoding Technologies to Guatemalan Choirbooks, Facilitating Preservation and Musicological Studies of the Colonial Repertoire.” Presented at the Music Encoding Conference, University of Vienna, Vienna, Austria. May 31<sup>st</sup>. (*Refereed*)
- “Preservation of the Colonial Musical Heritage of Guatemala through Digitization and Music Encoding Technologies.” Presented at the Association of Canadian Archivists McGill Student Chapter’s annual colloquium: Archival Outreach & Hidden Collections, McLennan-Redpath Library Complex, McGill University, Montréal, Québec, Canada. March 18<sup>th</sup>. (*Refereed*)
- 2018 “Guatemalan Manuscript Digitization Project.” Presented at the SIMSSA Workshop XVII: Infrastructure for Music Discovery, CIRMMT, McGill University, Montréal, Québec, Canada. December 1<sup>st</sup>.
- “Automatic Scoring up of Parts in Mensural Notation.” Presented at the Medieval and Renaissance Music Conference, Maynooth University, Maynooth, Ireland. July 6<sup>th</sup>. (*Refereed*)
- “Automatic Scoring up of Music in Mensural Notation.” Presented at the Music Encoding Conference, Maryland University, College Park, Maryland, US. May 23<sup>rd</sup>. (*Refereed*)
- “Automatic Scoring up of Mensural Parts.” Presented at the Digital Musicology Workshop, CIRMMT, McGill University, Montréal, Québec, Canada. April 27<sup>th</sup>.
- 2017 “Automatic Scoring-up Tool for Mensural Music.” Presented at the SIMSSA Workshop XII, CIRMMT, McGill University, Montréal, Québec, Canada. August 7<sup>th</sup>.
- “A Methodology for Encoding Mensural Music: Introducing the Mensural MEI Translator.” Invited talk at the Music Technology Group, Universitat Pompeu Fabra, Barcelona, Spain. May 22<sup>nd</sup>.
- “A Methodology for Encoding Mensural Music: Introducing the Mensural MEI Translator.” Presented at the Music Encoding Conference, Université de Tours, Tours, France. May 17<sup>th</sup>. (*Refereed*)
- 2016 “Digital Encoding of Mensural Music.” Presented at the SIMSSA Workshop X, CIRMMT, McGill University, Montréal, Québec, Canada. September 24<sup>th</sup>.

## Honors and Awards

2018–present	FRQSC Grant (\$21,000 CAD/year for four years). Fonds de Recherche Société et Culture du Québec, Canada.
2019–2020	McGill nominee for the Northeastern Association for Graduate Schools (NAGS) Distinguished master’s Thesis Award. Graduate and Postdoctoral Studies, McGill University, Canada.
2019	CIRMMT Inter-Centre Research Exchange Funding (\$2,500 CAD). Centre for Interdisciplinary Research in Music Media and Technology, Canada.
2019	Best Paper Award: “Application of Music-Encoding Technologies to Guatemalan Choirbooks, Facilitating Preservation and Musicological Studies of the Colonial Repertoire.” Music Encoding Conference, Vienna.
2018, 2019	CIRMMT Travel Award (\$1,000 CAD) for conference presentation. Centre for Interdisciplinary Research in Music Media and Technology, Canada.
2013	Honors mention for undergraduate thesis. Universidad del Valle de Guatemala, Guatemala.
2007, 2010	Academic distinction. Universidad del Valle de Guatemala, Guatemala.
2007–2009	Blackburn Scholarship. Universidad del Valle de Guatemala, Guatemala.

## Affiliations

### **Music Encoding Initiative (MEI).**

- Board Member (2020–2022)
- Mensural Interest Group Co-Chair (2020–present)
- Member and collaborator of the Mensural Interest Group (2016–present)

### **Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT), Canada.**

- Student coordinator of the Research Axis 2: Music information research (2017–2019)
- Student member (2016–present)

### **International Society for Music Information Retrieval (ISMIR).**

- Member (2017–present)

### **Distributed Digital Music Archives & Libraries (DDMAL) Lab. McGill University, Canada.**

- Research Assistant (2015–present)

## **Other Activities**

- 2011                      Choir member in Gluck's "Orfeo ed Euridice" opera, directed by Massimo Pezzutti. Universidad Internaciones, Guatemala City, Guatemala.
- 2010–2012                Opera singing training with soprano Karin Rademann. Guatemala City, Guatemala.
- 2009                      Workshop in Music Reading. Universidad Internaciones, Guatemala City, Guatemala.
- 2010, 2012                Basic training in violin and piano

## **Computer Experience**

Programming languages: Python, Java, JavaScript, Max/MSP, MATLAB  
Music encoding formats: LilyPond, MEI, Humdrum  
Document markup language: LaTeX

## **Languages**

Spanish: native language  
English: excellent