

Matthew Hamilton

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Education

- 2022 – ···· **Ph.D. (Candidate), Università di Bologna / University of Edinburgh** UnaHerDoc
Topic: *Open Methods for Digital Conservation of Historical Musical Instruments.*
- 2016 – 2017 **M.Sc. Acoustics and Music Technology, University of Edinburgh**
Thesis title: *Coupled Finite Difference Strings and Plates.*
- 2006 – 2010 **B.Mus. Music Technology, University of Edinburgh.**

Employment History

- 2018 – 2022 **Digital Development Technician.** University of Edinburgh
- 2015 – 2016 **Apple Technician,** MR Systems.
- 2011 – 2015 **Apprentice Luthier.** Noden Guitars.

Research Publications

Conference Proceedings

- 1 M. Hamilton, M. Ducceschi, C. Vicens, R. Livi, and A. McPherson, "Augmentation of a historical harpsichord keyboard replica for haptic-enabled interaction in museum exhibitions," in *Proceedings of the International Conference on New Interfaces for Musical Expression*, Canberra, Australia, Jun. 2025.
- 2 M. Hamilton, R. Russo, C. J. Webb, and M. Ducceschi, "A two-register haptic interface for articulated control of harpsichord physical models," in *Conference: 12th Convention of the European Acoustics Association (Forum Acusticum 2023)At: Malaga, Spain*, Jun. 2025.
- 3 M. Hamilton, M. Ducceschi, A. Mousseau, and S. Duran, "Magpie: A web-based, open-source framework for plate vibration analysis," in *INTER-NOISE and NOISE-CON Congress and Conference Proceedings*, vol. 270, Oct. 2024, pp. 5918–5929.
- 4 M. Ducceschi, M. Hamilton, and R. Russo, "Simulation of the snare-membrane collision in modal form using the scalar auxiliary variable (sav) method," in *Conference: 10th Convention of the European Acoustics Association (Forum Acusticum 2023)At: Turin, Italy*, Sep. 2023.
- 5 R. Russo, M. Ducceschi, S. Bilbao, and M. Hamilton, "Efficient simulation of acoustic physical models with nonlinear dissipation," in *"Conference: SMC 2023 / SMAC 2023 (Sound and Music Computing Conference 2023 together with Stockholm Music Acoustic Conference 2023)At: Stockholm, Sweden"*, Jun. 2023.

Skills

- Languages CEFR B1 German and Italian
- Misc. Certified Software Carpentry Instructor