## ANDREA F. GENOVESE

## CONTACT INFORMATION

| Address: | 35 West 4th St., New York, NY, United States |
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| PHONE:   | +1 (973) 580-1380                            |
| E-MAIL:  | afgenovese500@gmail.com / genovese@nyu.edu   |
| WEBSITE  | http://andreagenovese.com                    |

## EDUCATION

| Ph.D. Candidate at MUSIC AND AUDIO RESEARCH LAB, NYU Steinhardt, New York, NY, United States.<br>Immersive Audio  |
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| Doctoral candidate in Music Technology in the topic of Immersive Audio. Current<br>interests regard pychoacoustics research, audio development for Virtual Reality, 3D<br>audio customization and machine learning applied to spatial audio analysis. |
| Master of Engineering UNIVERSITY OF YORK, York, UK<br>Electronic Engineering with Music Technology Systems  |
| MEng degre completed with First Class Honours. "Individualisation and Reverber-<br>ation Factors in the Subjective Assessment of Plausibility in a Binaural Auditory<br>Display".   |
| ECOLE EUROPEENNE BRUXELLES II - WOLUWE, Brussels, Belgium<br>European Baccalaureat  |
| Employment  |
| Adjunct Professor at NYU STEINHARDT New York, U.S. 3D Audio   |
| Graduate level class based on immersive audio theory and implementation   |
| Adjunct Professor at NYU STEINHARDT New York, U.S.<br>Fundamentals of Digital Signal Theory LAB   |
| Graduate level lab focused on programming and DSP   |
| Adjunct Professor at NYU STEINHARDT New York, U.S.<br>Fundamentals of Digital Signal Theory   |
| Graduate level theoretical class focused on audio-relevant math and DSP.  |
| 3D-Audio Tutor at NYU, STEINHARDT New York, U.S.<br>Graduate-level Tutoring for 3D-AUDIO class  |
| Graduate Teaching Student at UNIVERSITY OF SALFORD, UK<br>Acoustics Research Centre   |
| Teaching assistantship for undergraduate classes in digital audio processing.   |
| Italian Language Teacher at WIZARD, Ilha Solteira, Brazil<br>Teacher of Italian Language to a class of Portuguese students  |
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# PRIVATE-SECTOR EMPLOYMENT

| 2018      | Research Intern at MICROSOFT RESEARCH, Redmond, US  |
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|           | Research project in the Audio & Acoustics Research Group. Blind room parame-<br>ter extraction from noisy speech using a machine-learning based approach. Work<br>submitted to ICASSP.  |
| 2017      | Research Contractor at THX, San Francisco, US   |
|           | Research and development of in-game binaural audio evaluation using VR headsets.<br>Developed API to provide game developers with 3D audio perception tracking tools.   |
| 2012-2013 | Research Intern at FRAUNHOFER IIS, Erlangen, Germany<br>Audio & Multimedia Dept.  |
|           | Research work on binaural conversion algorithms. Coded efficient late reverberation transition detection in BRIRs and hybrid multichannel conversion to binaural format. Focus on signal processing and formal audio quality testing. |
| 2011      | Exchange Intern at UNESP, Ilha Solteira, Brazil<br>Implementation of Simulated Annealing and Tabu Search algorithms in C++ for<br>automated puzzle solving.   |

## ACADEMIC ACTIVITIES

| 2015-Present | Co-administrator and Project Manager of the Immersive Audio Interest<br>Group at NYU Steinhardt. Took roles as project manager, web devel-<br>oper, event organizer.  |
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| 2018-Present | Key-contact at MARL for the NSF HoloDeck project. Implementation of audio protocols, transmission and rendering systems. Acoustic measurements of participating labs. |
| 2018         | Part of the organization and research effort for the concert event <i>Ozark</i><br><i>Henry on the Holodeck: Maps to the Stars</i>                                    |
| 2018         | Part of the organization for the concert event <i>Concert on the Holodeck:</i><br><i>Connecting Artists</i>   |
| 2017         | Organizer of the NYU Tech Tour Event for the AES 143rd Convention   |
| 2016-2017    | Organizer of the Open House showcase event for the Music Technology program at NYU Steinhardt   |
| 2016         | Co-organizer and leader of the volunt<br>eering effort for the $ISMIR\ 2016$ conference in New York   |

Conference proceedings

- 2019 Gospodarek M., Genovese A., Dembeck D., Brenner C., Roginska A., & Perlin K. (2019, October). Sound design and reproduction techniques for co-located narrative VR experiences, *Audio Engineering Society Convention 147, New York.*
- 2019 Hupke R., Sridhar S., Genovese A., Nohput M., Peihs S., Beyer T., Roginska A., & Peissig J. (2019, October). A Latency Measurement Method for Networked Music Performances Audio Engineering Society Convention 147, New York.
- 2019 Genovese A., Gospodarek M. & Roginska A., (2019, September). Mixed Realities: a live collaborative musical performance 5th International Conference on Spatial Audio (ICSA), Ilmenau.
- 2019 Genovese A., Gamper H., Pulkki V., Raghuvanshi N., & Tashev I. (2019, May). Blind Room Volume Estimation from Single-channel Noisy Speech *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Brighton.*
- 2019 Genovese A. & Roginska, A. (2019, April). HMDiR: An HRTF Dataset Measured on a Mannequin Wearing XR Devices, Audio Engineering Society Conference: 2019 AES International Conference on Immersive and Interactive Audio, York.
- 2019 Vanasse, J., Genovese, A., & Roginska, A. (2019, March). Multichannel Impulse Response Measurements in MATLAB: An Update on ScanIR Audio Engineering Society Conference: 2019 AES International Conference on Immersive and Interactive Audio, York.
- 2019 Roginska, A., Lee, H., Mendez Mendez, A. E., Murakami, S., & Genovese, A. (2019, March). CityTones: A Repository of Crowdsourced Annotated Soundfield Soundscapes. In Audio Engineering Society Convention 146. Audio Engineering Society, Dublin.
- 2018 Genovese A., Zalles G., Reardon G., & Roginska A. (2018 August). Acoustic Perturbations in HRTF measured on Mixed-Reality Headsets AES Conference: Audio for Virtual and Augmented Reality, Redmond.
- 2018 Reardon G., Genovese A., Zalles G., Flanagan P., & Roginska A. (2018 August). Evaluation of Binaural Renderers: Sound Quality Assessment. AES Conference: Audio for Virtual and Augmented Reality, Redmond.
- 2018 Boren B. & Genovese A. (2018 June). Acoustics of Virtually Coupled Performance Spaces. *ICAD 2018, Michigan Tech, U.S.*.
- 2018 Reardon G., Genovese A., Zalles G., Flanagan P., & Roginska A. (2018 May). Evaluation of Binaural Renderers: Externalization. AES 144th Convention, Milan, Italy.

- 2018 Reardon G., Genovese A., Zalles G., Flanagan P., & Roginska A. (2018 May). Evaluation of Binaural Renderers: Localization. *AES* 144th Convention, Milan, Italy.
- 2017 Reardon G., Calle J.S., Genovese A., Zalles G., Olko M., Jerez C., Flanagan P., & Roginska A. (2017, October). Evaluation of Binaural Renderers: A Methodology. In *AES143rd Convention, New York, U.S.*.
- 2017 Olko M., Dembeck, D., Wu Y., Genovese A., & Roginska A. (2017, October). Identification of Perceived Sound Quality Attributes of 360° Audiovisual Recordings in VR Using a Free Verbalization Method. In AES 143rd Convention, New York, U.S.
- 2016 | Genovese A., Juras J., Miller C., & Roginska A. (2016, June). Investigation of ITD symmetry in measured HRIRs. In *ICAD 2016, Canberra*, *Au.*.
- 2016 | Genovese A. F., Juras J., Miller C., & Roginska A. (2016, July). The Effect of Elevation on ITD Symmetry. In *AES: Headphone Technology Conference. Aalborg, Denmark*
- 2016 | Miller C., Juras J., Genovese A.F. & Roginska A., (2016, July). Interaural Distances in Existing HRIR Repositories. In *AES: Headphone Technology Conference. Aalborg, Denmark*
- 2012 Manola F., Farina A., & Genovese A. (2012, March). A comparison of different surround sound recording and reproduction techniques based on the use of a 32 capsules microphone array, including the influence of panoramic video. In AES UK 25th Conference: Spatial Audio in Today's 3D World.

#### GRANTS & AWARDS

| 2018, 2019 | AES Educational Grant for Graduate Studies in Audio Engineering<br>Audio Engineering Society |
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| 2018       | Steinhardt Doctoral Research and Travel Grant<br>New York University                         |
| 2016, 2018 | ICAD Think Tank conference travel award<br>International Conference on Auditory Displays     |
| 2015       | Steinhardt Doctoral Scholarship<br>New York University                                       |
| 2014       | The York Award<br>University of York   |

### EXTRA-CURRICULAR ACTIVITIES

| 2015-Present | AES Member<br>Audio Engineering Society                  |
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| 2015-Present | IEEE SPS Student member<br>Signal Processing Society     |
| 2010-2012    | President of the Italian Society<br>University of York   |
| 2011         | Judo Club Team Captain<br>University of York             |
| 2011-2012    | Member of the Free Culture Society<br>University of York |

## Software & Programming Skills

| Basic:        | Assembly, VHDL, HTML, Lua             |
|---------------|---------------------------------------|
| Intermediate: | LaTeX, C, C#, Python, ProTools, Unity |
| Advanced:     | MATLAB                                |

## LANGUAGES

| ITALIAN: | Mothertongue                      |
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| English: | Advanced Professional Proficiency |
| Spanish: | Intermediate Proficiency          |
| French:  | Intermediate Proficiency          |

#### References

NYU Academic Supervisor: Dr. Agnieszka Roginska *BMus, MMus, PhD* roginska@nyu.edu Tel: +1(212)998-5141

Other references available on request.