Cem Çakmak, PhD

Adress: Berlin 12051

Contact: contact@cem.works | www.cem.works

Birthdate: Nationality: Turkey

Curriculum Vitae

Work Experience

2020 - Artist and Researcher, Freelance

Berlin, Germany

2018 Developmental Teaching Assistant,

Rensselaer Polytechnic Institute, NY, USA

Engineering support for Sound Recording and Production course. Evaluation, testing, and cataloging of equipment and materials donated by **Pauline Oliveros** to the Center for Deep Listening Archives

2016 - 2018 Research Assistant,

Rensselaer Polytechnic Institute, NY, USA

Research assistantship under Dr. Rob Hamilton's

Music in Virtual Worlds Lab

2017 Researcher,

The Craig H. Neilsen Foundation, NY, USA

Assistive technologies research under **Dr. Jonas Braasch**, reporting and dissemination via ISATMA

2015 - 2016 Artist, Freelance

Istanbul, Turkey

Education

2016 - 2020 Rensselaer Polytechnic Institute, NY, USA

School of Humanities, Arts and Social Sciences

PhD, *Electronic Arts* Advisor: Rob Hamilton

Thesis: A Systems-Theoretical Approach to Spatial

Electronic Music Practices

2013 - 2015 **Istanbul Technical University**, Turkey

Centre for Advanced Studies in Music (MIAM)

MSc, *Music*

Advisor: Anil Çamci

Thesis: Online Gaming as a Model for Networked Intra-

Active Music Spaces

2009 - 2013 University of Manchester, UK

School of Mechanical, Aerospace and Civil Engineering

BEng (Hons), Civil Engineering

Thesis: Development and Application of Water Resistant

Foam Concrete

Knowledge and Skills

Languages:

Turkish (Native) English (C2) German (B2)

Programming:

C, C++, C#, HTML, CSS, Java, Python, TensorFlow, Fortran, Mathematica, MATLAB, Xcode, Max/MSP, gen~, Pure Data, ChucK, WebAudio, Arduino, OSC, MIDI

Audio Software:

Ableton Live, Cubase, Logic, ProTools, Audacity, Reaper, SPAT, Panoramix, Dante

Graphic and Visuals:

Processing, Unity3D, openFrameworks, A-Frame, LaTeX, Premiere, Wordpress, After Effects, Final Cut, AutoCAD

Operating Systems:

OS X, Windows, Linux, iOS, Android

Performance:

Guitar, Piano, Percussion, Live-Electronics, Ambisonics

Further Education

2018 - **Spatial Audio Summer Seminar**, EMPAC, New York, Jul 9-13

2022 - Binaural Auditory

Display, Interactive

Sonification Workshop (ISon), Delmenhorst, Sep 22-23

Selected Performances

tch (Live Electronics)

01.08.2025 - Transferans Gallery Echoes #2, Errant Sound, Berlin

05.12.2024 - Taming the City, Errant Sound, Berlin

10.05.2024 - Transferans Label Night #11, ACUD, Berlin

03.05.2024 - Echoing Dimensions, Kunstraum Potsdamer, Berlin

26.04.2023 - Fundraiser for Communities Affected by the Earthquake in Syria/Turkey, Arkaoda, Berlin

SOFTER (Live Electronics)

24.03.2024 - Variable Cloudiness, Cashmere Radio, Berlin

Das Schwarz des Birkenspanners *by Amelie von Godin* (Live SFX) 9-12.03.2023 - HfS Ernst Busch, Berlin

P.W.A.H (Live Electronics, with Roberta Stein)

15.11.2024 - Im Sog Des Waldes, Fotogalerie Friedrichshain

19.11.2022 - Impromtu Series, ACUD, Berlin

double-lined (Live Electronics)

20.11.2021 - Schloss Schönow, Brandenburg

die Zofen by Amelie von Godin (Sound Design & Composition) 28 & 29.09.2021 - HfS Ernst Busch, Bühne UNTEN, Berlin

nötr (Fixed Multi-Channel) 41' 46"

06.08.2018 - International Computer Music Conference (ICMC), Daegu, South Korea

18.07.2018 - New York City Electroacoustic Music Festival (NYCEMF), New York

26.06.2018 - Kaleidophone: New Multichannel Electronic Music from MIAM, Arter Gallery, Istanbul

20.04.2018 - nötr: 43-channel acousmonium / an evening of electronic music. EMPAC. New York

10.04.2018 - [ART_X] Pop-up Concert, RPI Playhouse, New York

04.04.2018 - *3rd Collaborative Electroacoustic Music Concert*, University of Buffalo, New York

Çizgi Film Kusagi / Cartoon Time (Live Electronics) ~20' 28.12.2017 - *Çünkü Siz Buna Değersiniz*, Peyote, Istanbul

taalq (Generative Quadraphonic) ~17'

04.05.2017 - Collar Works Gallery, New York

04.04.2017 - Bennington College, Vermont

28.02.2017 - Bard College, New York

ob/lik (Live Electronics, with G. Özdemir)

30.04.2016 - A.I.D Room #5, Moda, Istanbul

26.04 2016 - Radio Patapoe, OT301, Amsterdam

24.04.2016 - SOTU Festival, Butcher's Tears, Amsterdam

20.03.2016 - MultiRAID Festival, Arkaoda, Istanbul

Monad (Networked Audiovisual)

26.12.2015 - *A.I.D Room #2*, Private Venue, Istanbul

24.05.2015 - Electronic Music Composition 2015, Arkaoda

AAA(...)AAA (Electroacoustic/Live Diffusion) 5' 01"

16.10.2015 - MIAM Electroacoustic Retrospective, Maçka

01.06.2014 - Electronic Music Composition 2014, Arkaoda

Awards & Grants

MUSIKFONDS e.V.

2025

Project Funding 2022-2023

Research Stipend

2021

Project Funding

RPI-HASS

2018 - 2020 Research Stipend 2017 & 2018 Production Grant

Web Audio Conference

2019

Best Paper Award

Installation

Harmonic Motion (in F#)
Tanzhalle Wiesenburg
2025, Oct 30-Nov 2

Beating Variations: 60-80Hz Kulturquartier Bethanien 31.01-04.02.2025 frei-raum.berlin 16-18.05.2024

u-ton

Gallery Periode, Berlin 2023, Oct 20-22

Oblique

frei-raum.berlin 2022, Dec 1-4

NO AXIS

Gitter Raum, Essen

2021, Nov 5-7

Codes of Light

Contemporary Istanbul

2015, Nov 12-15

Art Residency

2021, Nov 15-21 Parallel Residency Schloss Schönow, Brandenburg

2018, Jan 8-16 & Apr 16-20 Acousmonium EMPAC, New York

Papers & Publications

Çakmak, Cem. "Infrastructures for Immersion: Institutional Mediation of Spatial Audio." *Most Wanted: Music Research*, 13 November 2025.

Çakmak, Cem. "Implementing Ignorance and Unlearning Methods to Al Music Systems." *CTM Festival Research and Networking Day (Module 3)*, 29 January 2023.

Çakmak, Cem, and Rob Hamilton. "od: Composing Spatial Multimedia for the Web." Journal of the Audio Engineering Society 68, no. 10 (November 30, 2020): 747–55.

Çakmak, Cem, and Robert Hamilton. "Composing Spatial Music with Web Audio and WebVR." In *Proceedings of the Web Audio Conference*. Trondheim, Norway, 2019.

Çakmak, Cem, Anil Çamci, and Angus G. Forbes. "Applying Game Mechanics to Networked Music HCI Systems." In *New Directions in Music and Human-Computer Interaction*, edited by Simon Holland, Tom Mudd, Katie Wilkie-McKenna, Andrew McPherson, and Marcelo M. Wanderley, 223-41. Springer Series on Cultural Computing. Cham: Springer International Publishing, 2019.

Çakmak, Cem, "Theory and Technique of Super High Frequency Lighting," Artist Talk in *Proceedings of the International Symposium on Electronic Art*, Manizales, Colombia, 2017.

Keil, Nathan, Huang, Min and Çakmak, Cem, "Designing Immersive Audiovisual Environments for Music Performers with Disabilities," In *Proceedings of the 5th Annual International Symposium on Adaptive Technology in Music and Art*, Troy, NY, 2017.

Çakmak, Omer C. and Hamilton, Rob, "Musical Sonification of Super High Frequency Lighting", In *Proceedings of the International Computer Music Association Conference*, Shanghai, China, 2017.

Çakmak, Cem, Anil Çamci, and Angus G. Forbes. "Networked Virtual Environments as Collaborative Music Spaces." In *Proceedings of the International Conference on New Interfaces for Musical Expression*, 106–11. Brisbane, Australia, 2016.

Çakmak, Ömer C., Çamci, Anil and Forbes, Angus G. "Using Game Mechanics to Facilitate Networked Musical Collaboration," *CHI 2016 Music and HCI Workshop*, San Jose, CA. May 2016.

Çakmak, Ömer C. and Çamci, Anil. (2015) "Online Gaming as a Model for Network Music Systems," *ISCRiM Student Conference on Music Multimedia and Electronics 2015*, University of Leeds, Leeds, UK. June 15, 2015.

Academic Service

2023 - Present

Max Consultant & Beta Tester

Cycling74

2022 - Present

Member

CHIME-ESPRC Music and
HCI Research Network

2019 & 2021 Guest Jury for Computation Based Basic Design Istanbul Bilgi University

2019
Reviewer
International Computer
Music Conference (ICMC)

References

Dr. Robert K. HamiltonAssociate Professor, Arts
Department Head,
Rensselaer Polytechnic
Institute
hamilr4@rpi.edu

Dr. Anil Çamci
Assistant Professor of
Performing Arts Technology,
University of Michigan at Ann
Arbor
acamci@umich.edu

Dr. Reuben de LautourAssistant Professor of Sonic
Arts, Istanbul Technical
University
lautour@itu.edu.tr