Stewart Blackwood

Sound Designer/Composer/Creative Coder www.stewartblackwood.com blackwoodsounddesign@gmail.com (330)554-9438

Curriculum Vitae

Work Experience

Carnegie Mellon University, School of Drama, August 2023 – Present

Assistant Professor of Composition and Sound Design

- Created and taught composition and coding courses focusing on creating sonic environments for live productions.
- Mentored MFA and BFA students through various levels of audio focused artistic projects.
- Advising on career, thesis, and academic work for sound design focused students.

Boomcloud360, March 2022 – July 2023

Audio Experience Engineer

- Created bespoke spectral audio analysis tools.
- Created production algorithms/platform tunings.
- Live demonstrations/presentations of next-gen technology.
- Created novel headphone-based spatial audio filter generation technology.
- Conducted and refined critical user acceptance tests for production releases.

Academic Papers & Grants

Master's Thesis – A Methodology for Creating Theatrical Spatial Sound Experiences

Norman Design Recipient - Creating Tools for Spatial Audio Trajectories

USITT Sound Commission – Creating MIDI Instruments for Use in Live Theater

GSA Travel Grant UCSD

KSU Flash Grant Recipient: Macbeth, 2016

Teaching Experience

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Introduction to Sound Design	Carnegie Mellon University	(2024)
Sound Design for Non-Linear Story telling	Carnegie Mellon University	(2024)
Composition for Theatrical Sound Design 1	Carnegie Mellon University	(2024)
Coding and Control for Theatrical Sound Design	Carnegie Mellon University	2023
Composition for Theatrical Sound Design 1	Carnegie Mellon University	2023
Sound Design Practicum	UC San Diego	2021 - 2022
World Building in Unity Pt. 1 & 2 ^	UC San Diego	2021
Introduction to Theatre Design *	UC San Diego	2020
Great Performances on Film *	UC San Diego	2020 - 2021
Introduction to Theater *	UC San Diego	2019
Lighting & Sound Practicum~	Kent State University	2018
Audio Editing for Podcasts ^	Black Squirrel Radio	2016-2018

Education

Master of Fine Arts – Sound Design for Theater & Dance, UC San Diego Bachelor of Fine Arts – Sound Design & Technology, Kent State University

Student Mentoring

Student Mentoring					
Lear	Carnegie Mello	n University	St. Ray Mo	rgan	2023
Task Manager's Normal Day	UCSD Honor's 7	hesis	St. Stepher	n Lightfoot	2021
MSG	UCSD		St. Kate M	cleod	2020
New Directions	UCSD		St. Various		2020
Mr. Burns	UCSD		St. Hailey E	Brown	2020
Suessical Jr.	Hangar Theater	-	St. Raigan	Williams	2018
Black Squirrel Radio Podcasts	Black Squirrel R	adio	St. Various		2016-2018
Theatre Sound Desi	gn				
Napoli Milionaria *		UCSD: Potiker T	heater	Dir. Marco Barricelli	2022
51 Barrio!		UCSD: Potiker T	heater	Cgph. Patricia Huerta	2021
Sotoba Komachi *		UCSD: Forum T	heater	Dir. Michelle Hyunh	2021
Heap *		UCSD: Remote	Production	Dir. Colette Robert	2021
Proof of Love *		Black Lives Blac	k Words	Dir. Kyle Haden	2020
La Cage		Cygnet Theater		Dir. Sean Murray	2020
Ironbound		UCSD: Arthur W	/agner	Dir. Emily Moler	2020
Winter's Tale *		Island Shakespe	eare Festival	Dir. Kyle Haden	2019
Midsummer Night's Dream		Island Shakespe	eare Festival	Dir. Jackie Apodaca	2019
Godspell Jr.		Cleveland Playh	iouse	Dir. Mariah Burks	2019
Wild Fire and The Bird Scouts	*	Cleveland Playh	iouse	Dir. Luke Brett	2019
Feed *		Cleveland Playh	iouse	Dir. Pamela DiPasquale	2019
Amazing Tale of The Backyard	Adventure *	Hangar Theatre	: Kiddstuff	Dir. Christopher Nunez	2018
The Transition of Doodle Pequ	eño *	Hangar Theatre	: Kiddstuff	Dir. Kyle Haden	2018
Death Comes to Us All, Mary A	Agnes	Hangar Theatre	: The Wedge	Dir. Christopher Nunez	2018
A Brief History of America *		Hangar Theatre	: The Wedge	Dir. Kyle Hayden	2018
Pan-African Tales *		Pan-African The	eatre Ensemble	Dir. Tameka Ellington	2018
Emilie *		Kent State Univ	ersity	Dir. Courtney Brown	2018
Hedda Gabler *		Kent State Univ	ersity	Dir. Cory Atkins	2018
Haunted School House and Lal	b *	Factory of Terro	or	TD. Liam Roth	2017
Dance '17 Mosaic *		Kent State Univ	ersity	Dir. Jeffery Rockland	2017
Little Women		Kent State Univ	ersity	Dir. Terri Kent	2016
Macbeth *		Kent State Univ	ersity	Dir. Fabio Polanco	2017
Women Beware Women *		Rubber City The	eatre	Dir. Dane Leasure	2015
The Tell-Tale Heart		Kent State Univ	ersity	Dir. David Holland	2015
Omega Man		Kent State Univ	ersity	Dir. Hannah Graham	2015
Dance '15 Moving Parts		Kent State Univ	ersity	Dir. Joan Meggit	2015
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Kent State University

Kent State University

Dir. Danny O'Donnell

Dir. Jeremie Newcomb

2014

2014

New Works Festival

Woodsman

^{*} Denotes original composition

Composition for Theatre & Film

Composition for Theatre & Fill	III		
Catharsis	Maelstrom Collaborative Arts	Cgph. Grace Wen	2023
Rise of the Bronze Dragon*	Kardos Animation	Dir. Nicholas Kardos	2023
Pia's Wonderous Adventures in Txlandia*	UCSD, CalIT2 Ideas Grant	Dir. Robert Castro	2021
Ubiquity*	UCSD (In-Development)	Dir. Garret Schulte	2019
Basement*	KSUIF	Dir. Rachel Ramras	2017
Intimate Apparel	Kent State University	Dir. Fabio Polanco	2017
Khaye Feygl	Kent State University	Cgph. Jeffery Rockland	2017
* Denotes film			
Assistant Sound Design			
Man in Love	UCSD: Mandel Weiss Theatre	SD. MaeAnn Ross	2019

Man in Love	UCSD: Mandel Weiss Theatre	SD. MaeAnn Ross	2019
Sweat	Cleveland Playhouse	SD. Jane Shaw	2018
Xanadu	Hangar Theatre	SD. Sean Hagerty	2018
Dolls House pt.2	Hangar Theatre	SD. Josh Maywood	2018
Chicago	Hangar Theatre	SD. Todd Hutchinson	2018
Into the Woods	Kent State University	SD. Cory Kosman	2016
BFA/SDF Dance	Kent State University	SD. Shane Cutlip	2015

Audio Engineer

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Beulah Rowely	NYC Workshop	Dir. Judith Dolan	2021
Theater Academy *	Cleveland Playhouse	PM. Penny Zaletel	2019
Hay Fever	Cleveland Playhouse	PM. Penny Zaletel	2018
Hi, Are You Single	Cleveland Playhouse	PM. Penny Zaletel	2018
Newground Theatre Fest *	Cleveland Playhouse	PM. Penny Zaletel	2018
2018 Theatre Academy	Cleveland Playhouse	PM. Penny Zaletel	2018
All Shook Up	Kent State University	SD. Courtney Jean	2018
Thoroughly Modern Mille *	Kent State University	SD. Cory Kosman	2016
Sideshow *	Kent State University	SD. Nicholas Drashner	2015
KDE Dance Show	Kent State University	SD. Charles Korecki	2015
House of Blue Leaves	Kent State University	SD. Shane Cutlip	2014
My Heart is a Drum	Kent State University	SD. Charles Korecki	2014
Hot Mikado *	Kent State University	SD. Nathan Rosmarin	2014

^{*} Denotes live mixing

Residencies, Related Experience, & Professional Affiliations

AES Member	2019-2023
SEAMUS Member	2019-2023
TSDCA Member	2018-2023
Maelstrom Collaborative Arts, Four Futures Artist: Rentism	2021
Maelstrom Collaborative Arts, Digital Performance R&D Cohort Member: Interactivity	2021
Maelstrom Collaborative Arts, Digital Performance R&D Cohort Member: Presenting	2021
Hangar Theatre, Sound Design Fellow	2018
Kent State, Audio Engineer	2017–2018
Black Squirrel Radio, Technical Director	2016-2018

Multimedia, Interactivity, Software Development

59 Acres – (2024) (In collaboration with La Jolla Playhouse and UCLA)

Developer & Technical Sound Designer

59 Acres is an extension of the 32 Acres and 200 Acres project. This is being produced for La Jolla Playhouse's WOW festival. It is based on the framework developed throughout 32 and 200 acres. This iteration will incorporate a deeper sense of user decision into the geolocated sound process.

(Unity, FMOD, C#, Firebase)

200 Acres – 2023 (In collaboration with Penn State and UCLA)

Developer & Technical Sound Designer

200 Acres is an extension of the 32 Acres project done for Penn State. It is based on the framework developed throughout 32 acres. For this iteration, we integrated Firebase which allows for improved data ingestion, versioning, and asset updates. (Unity, FMOD, C#, Firebase)

Audio FX Toolkit- 2022

Software Developer - <u>Link</u>

This is a software package for the Unity game engine written in C#. It allows for rapid audio effect prototyping. It does this by providing several useful DSP classes, example implementations, and extensive documentation. (C#, Unity, Doxygen)

Spaces, Between–2022

Software Developer & Sound Designer

This is a piece created for the composer Lydia Brindamour. It involved writing a Max/MSP patch that amplified only the resonant harmonics of a piano as well as spatializing the quintet of string instruments to move around the room in a circle slowly. I used the VBIP spatialization algorithm and a ring of eight speakers encircling the audience. (Max/MSP, Javascript)

32 Acres – 2021 (In collaboration with Center Theatre Group and UCLA)

Developer & Technical Sound Designer - Link

32 Acres is an app developed for the LA State Historic Park & presented by *Center Theatre Group*. It is a sound walk that tracks the user's location to trigger audio playback. The experience was created/written by Marike Splint. The music and sound content were created by Jonathon Snipes. It was available on Google Play and the iOS App Store. (Unity, FMOD, C#)

Terra Firma-2021

Developer, Co-Creator, Composer

Using AR software and printed images of tree seeds, the user was empowered to create an environment where the participant can wander aimlessly through the forest of their creation. All the trees were from different times and places but held one thing in common; they are extinct. (Unity)

Epoch- 2021

Co-Creator, Composer, Sound Designer, Co-Video/Projections Design

A multimedia experience dedicated to the exploration of time. Using a combination of video effects exploring time, we invited the audience to experience an interactive art-making experience. We edited and distorted a reproduction of an image of the audience on multiple surfaces by recording their gestures in real-time. It used live video feed, generative music, lighting, custom interactivity programming, and multiple projectors. (Max/MSP, Jitter, OBS)

Spatial Sound Suite-2021

Developer & Programmer - Link

A suite of object-based spatial audio tools & algorithms implemented in Javascript, C++ (with JUCE), and Max/MSP. The equipment for this work was funded in part by the Norman Design Fund. (C++, JUCE Framework, Javascript, Max/MSP)

Little Anarchist - 2020

Developer & Programmer - Link

Little Anarchist is a cascading distortion audio plugin. It utilizes waveshaping, clip, and soft distortion techniques. Included is a one-pole filter that allows the user to choose which part of the audio signal they would like to distort. Free to the internet. (C++, JUCE Framework)

Reflected Voices - 2020

Lead Developer, Composer, Sound Designer, Programmer - Link

Reflected Voices is a virtual sound-art installation. It was created and programmed in the Unity game engine. The audio was mixed and mastered in Ableton utilizing multichannel Binaural simulation. 3D Models were created in the program Blender. Presented in UC San Diego's Fringe Lab Festival. (Unity, Blender)

The Visualizer - 2019

Developer & Programmer

The Visualizer is a Max for Live device that allows the user to create 3D, real-time, geometric video designs. It has the ability to react to sound, vary in size, change color, change shape, etc. Utilized as a part of R&D at Maelstrom Collaborative Arts. Free to the internet. (Max/MSP, Jitter, Ableton)

VFX Processor for Feed – 2019

Control Interface Design, Composer, Sound Designer

Created an Ableton-based, vocal-effect-processing control interface. It allowed the actors to affect their voices in real-time: pitch bending, delay/reverb, chorus, and DJ-style sound effects. Utilized at the Cleveland Playhouse. (Ableton)

Slow No Wake - 2018

Composer, Sound Designer, Control Interface Design

Created original soundscapes, field recordings, and music for an art piece in Maelstrom, Collaborative Art's event *Bricolage*. A custom Ableton control interface was created for use in this project. (Max/MSP, Ableton)

Haunted School House and Laboratory – 2017

Composer, Sound Designer, Interactivity Designer

Designed a new sound system and composed all new music for a nearly fifty-year-old haunted house. Eighty-four speakers were hung, and two hours of music were written for the theme park. (Arduino, Max/MSP)

Summary of Skills

Audio Software : Ableton, Reaper, Logic, Musescore, QLab, FuzzMeasure, Smaart, Vectorworks, Canvas, Izotope, REW, SFX, macroLab, Sound Particle U

Composition: Extended Techniques, Electro-Acoustic Composition, Computer Music, Classical, Jazz, Indie, Pop, Ambient, Guitar Pedagogy, Orchestration, Counterpoint, Arrangement

Sound Reinforcement: Console Programming/Routing, Spatialization System Design, Instrument Mic-ing Techniques, Wireless Microphones, Live Mixing, Dante, Interactive Technology, RF Coordination, Dante Certified, Shure Integrated Systems Certified,

Computing : Max/MSP/Jitter, Git, Python, Unity, Pure Data, Software Development, JUCE Framework, C#, C++, Arduino, Max for Live, VST Programming

Video: Isadora, Qlab, OBS, Jitter, GEM, Adobe After Effects, Adobe Premiere, Photoshop, Illustrator, Blender

Awards

Award in Sound Design: Macbeth, 2018 (SETC)

Outstanding Sound Design: Macbeth 2017 (APO)

Outstanding Undergraduate Musician, 2017 (KDE)

Outstanding Sound Designer, 2017 (APO)

Rubenstahl Technical Theatre Award, 2018 (KSU)

Outstanding Sound Designer 2017 (APO)

Outstanding Sound Design: Tell-Tale Heart 2016 (APO)