

TONY DOYLE

CREATIVE DIGITAL ARTS



> EXPERIENCE

SELF EMPLOYED 2002 TO PRESENT

COMPOSER/PRODUCER/DEVELOPER - IRL/UK

I WORK ACROSS A RANGE OF DISCIPLINES TO PRODUCE CREATIVE SONIC AND AUDIO VISUAL WORKS. ALONG THE WAY I INCORPORATE MY INTERESTS IN DEVELOPMENT AND DATA SCIENCE TO WIDEN THE SCOPE FOR COLLABORATIONS WITH RESEARCHERS AND ARTS PRACTITIONERS.

GUEST LECTURER 2015-2018

LANCASTER INSTITUTE FOR THE CONTEMPORARY ARTS - UK

LECTURES ON THE USE OF LIVE CODING IN SOUND AND MUSIC TO 2ND AND 3RD YEAR UNDERGRADUATE STUDENTS OF FINE ART, THEATRE AND FILM. GUEST WORKSHOPS IN SPATIAL AUDIO DESIGN AND LISTENING TESTS.

PREVIOUS POSITIONS

POSTDOCTORAL RESEARCHER UNIVERSITY OF YORK - UK 2015

SPATIAL AUDIO WORKSHOPS - IRL/UK 2014/15

ASSOCIATE LECTURER DUBLIN CITY UNIVERSITY - IRL 2011/13

> EDUCATION

PHD. DIGITAL MEDIA ARTS GRADUATED 2015

UNIVERSITY OF LIMERICK - IRELAND

THESIS TITLE: SPECTRAL PRECEDENCE METHODOLOGIES IN SPATIAL AUDIO RESEARCH. HYBRID OF THEORETICAL AND PRACTICAL WORK.

MPHIL. MUSIC TECHNOLOGY GRADUATED 2011

TRINITY COLLEGE DUBLIN - IRELAND

TWO YEAR INTENSIVE PROGRAMME COVERING; COMPUTER MUSIC, PROGRAMMING, AUDIO ENGINEERING, MUSIC COMPOSITION, ORCHESTRATION

> SKILLS

COMPOSER

TRADITIONAL - CLASSICAL, JAZZ, ELECTRONICA ●●●●●●●●●●

COMPUTER - SUPERCOLLIDER, CHUCK, SONIC-PI ●●●●●●●●●●

PRODUCER

RECORDING - MIC TECH, MIXING, PRE-MASTERING ●●●●●●●●●●

PRODUCING - SONG-WRITERS, BANDS, MIDI MOCK-UPS ●●●●●●●●●○

DEVELOPMENT

APPS - C, C++, OBJECTIVE-C, SWIFT, JAVA ●●●●●●●●○○

DATA - PYTHON, R, D3.JS ●●●●●●○○○○

> PROFILE

ORIGINALLY FROM A PURE MUSIC BACKGROUND IN CLASSICAL AND JAZZ PERFORMANCE/COMPOSITION, MY PRACTICE HAS BECOME FOCUSED ON DIGITAL ARTS. I WAS INTRODUCED TO COMPUTER MUSIC DURING MY MASTERS STUDIES AND CONTINUED TO DEVELOP MY INTEREST FOR SONIC AND CODING INTERSECTIONS DURING MY DOCTORAL RESEARCH. THIS WORK AND SUBSEQUENT POST-DOCTORAL RESEARCH FOCUSED ON SPATIAL AUDIO IN THE AREA OF AMBISONICS AND SPECTRAL SPATIALISATION. THIS INCLUDED BOTH TECHNICAL DEVELOPMENT AND COMPOSITIONAL OUTPUT. SINCE THEN, MY PRACTICE HAS GROWN TO INCORPORATE WEB TECHNOLOGIES, DATA SCIENCE AND MACHINE LEARNING IN THE PRODUCTION OF CREATIVE WORKS.

> AWARDS

PHD SCHOLARSHIP

IRISH RESEARCH COUNCIL 2014

ARTS FUNDING

IRISH ARTS COUNCIL 2011

> CONTACT

ADDRESS

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> **SELECTED CONCERTS - PERFORMANCES - COMPOSITIONS**

- 2019** RINGMIND - PLANNED INSTALLATIONS AND PERFORMANCES IN THE UK AND GERMANY INVOLVING VISUALISATION AND SONIFICATION OF A SATURN-LIKE PLANET RING SYSTEM
- 2018**, SEPTEMBER, COLLABORATIVE COMPOSITION UNTITLED, WITH SOUND ARTIST LINDA O KEEFFE PERFORMED AT SONORA FESTIVAL, PORTO ALEGRE, BRAZIL
- 2018**, AUGUST, COLLABORATIVE COMPOSITION STOPS AND GAPS, WITH SOUND ARTIST LINDA O KEEFFE PERFORMED IN LOP LOP SPACE, SÃO PAULO
- 2018**, AUGUST, COLLABORATIVE COMPOSITION IF I WERE ME, WITH SOUND ARTIST LINDA O KEEFFE PERFORMED IN SOUND ROOM, RIO DE JANEIRO
- 2017** JULY, PERFORMANCE OF ORIGINAL WORKS AT VAVABOND, SHENJIE AND CAFE ZARAH, BEIJING CHINA.
- 2017** COMMISSIONED NETWORKED AND LIVE BROADCAST PERFORMANCE AND WORKSHOP FOR THE FULL OF NOISE ORGANISATION IN THE WALNEY NATURE RESERVE AS PART OF WORLD DAWN CHORUS DAY
- 2017-2020**, COLLABORATIVE INSTALLATION, HYBRID SOUNDSCAPES, WITH SOUND ARTIST LINDA O KEEFFE, EXHIBITED AT NEW ART EXCHANGE NOTTINGHAM 2017, YORK ART GALLERY 2019, GALLERY OLDHAM 2019
- 2016** THE BOURGES FESTIVAL FRANCE, PERFORMANCE OF ORIGINAL SPATIAL AUDIO COMPOSITION FOR 8 CHANNELS PIECE, 'S.P.S ETUDE'.
- 2015**, THE 4D SPACE, AMSTERDAM, SPATIAL AUDIO PERFORMANCE.
- 2012** HILLTOWN NEW MUSIC FESTIVAL, PERFORMANCE OF NEW ELECTRO ACOUSTIC COMPOSITION, PIECE, 'UNIVERSAL THEME'
- 2011** PERFORMANCE ON PREPARED PIANO FOR THE WORK 'MEMORIAL' BY CATHY MILLIGAN AT THE TOKYO WOMENS' PLAZA,
- 2011** COMPOSITION FOR 30 BODIES IN A SPACE, THE RENKU, COMPOSED BY TONY DOYLE AND ENSEMBLE MODERN PERFORMED AT THE TOKYO WOMENS' PLAZA
- 2011** COMPOSITION 'STRING OCTET G.S.M NO 1, FOR LIVE STRING OCTET AND 8 CHANNEL SPATIALISATION PERFORMED AT THE SAMUEL BECKETT THEATRE DUBLIN
- 2011** COMPOSITION CORE RATIOS, COMMISSIONED BY THE CON TEMPO STRING QUARTET, RELEASED ON THE ALBUM COMPILATIONS BY ICMS.
- 2008** ALBUM, CHICAGO SESSIONS WITH DAN GODSTON, LINDA O KEEFFE AND GUILLERMO GREGORIO
- 2007** COMPOSER FOR DOCUMENTARY FILMS IN IRELAND FOR KAIROS COMMS STUDIOS
- 2002- 2007** TOURING PIANIST FOR JAZZ ENSEMBLES

> **PEER REVIEWED PUBLICATIONS**

- INTERNATIONAL CONFERENCE ON SPATIAL AUDIO, GRAZ, SEPTEMBER 2015**, PRINTED PROCEEDINGS
'ON PREDICTION OF AUDITORY HEIGHT IN AMBISONICS', GAVIN KEARNEY AND TONY DOYLE, 3RD INTERNATIONAL CONFERENCE ON SPATIAL AUDIO, GRAZ, SEPTEMBER 2015.
- INTERNATIONAL CONFERENCE ON SPATIAL AUDIO, GRAZ, SEPTEMBER 2015**, PRINTED PROCEEDINGS
'A VIRTUAL LOUDSPEAKER DATABASE FOR AMBISONICS RESEARCH', GAVIN KEARNEY AND TONY DOYLE, 3RD INTERNATIONAL CONFERENCE ON SPATIAL AUDIO, GRAZ, AUSTRIA 2015.
- 139TH INTERNATIONAL CONVENTION OF THE AUDIO ENGINEERING SOCIETY 2015**
'A HRTF DATABASE FOR VIRTUAL LOUDSPEAKER RENDERING', GAVIN KEARNEY AND TONY DOYLE, 139TH INTERNATIONAL CONVENTION OF THE AUDIO ENGINEERING SOCIETY, NEW YORK, OCTOBER 2015.
- 139TH INTERNATIONAL CONVENTION OF THE AUDIO ENGINEERING SOCIETY 2015**
'HEIGHT PERCEPTION IN AMBISONIC BASED BINAURAL DECODING', GAVIN KEARNEY AND TONY DOYLE, 139TH INTERNATIONAL CONVENTION OF THE AUDIO ENGINEERING SOCIETY, NEW YORK, OCTOBER 2015.

> SYMPOSIA/WORKSHOPS

IRISH SOUND, SCIENCE AND TECHNOLOGY ASSOCIATION (ISSTA) — AUG. 2013

PRESENTATION OF A PEER REVIEWED RESEARCH PAPER: PERCEPTUAL EFFECTS ASSOCIATED WITH SPATIALISED PARTIALS AND FREQUENCY BANDS IN A MULTICHANNEL ENVIRONMENT. THIS REVIEWED CLASSICAL AND CONTEMPORARY LITERATURE AND OUTLINED MY EXPANSION OF THESE CONCEPTS IN 2D AND 3D VIRTUAL AUDITORY DISPLAY ENVIRONMENTS.

IRISH SOUND, SCIENCE AND TECHNOLOGY ASSOCIATION (ISSTA) — AUG. 2013

PRESENTATION OF A PEER REVIEWED RESEARCH PAPER: PERCEPTUAL EFFECTS ASSOCIATED WITH SPATIALISED PARTIALS AND FREQUENCY BANDS IN A MULTICHANNEL ENVIRONMENT. THIS REVIEWED CLASSICAL AND CONTEMPORARY LITERATURE AND OUTLINED MY EXPANSION OF THESE CONCEPTS IN 2D AND 3D VIRTUAL AUDITORY DISPLAY ENVIRONMENTS.

IRISH SOUND, SCIENCE AND TECHNOLOGY ASSOCIATION (ISSTA) — AUG. 2013

PRESENTATION OF A PEER REVIEWED MULTICHANNEL COMPOSITION: THIS WORK WAS A DEMONSTRATION OF THEORIES OF SOURCE WIDTH EXTENT AS APPLIED TO SPECTRAL SPATIALISATION. IT WAS REALISED WITH MY OWN SPATIAL APPLICATION DESIGNED FOR 2D AND 3D MULTICHANNEL ARRAYS.

DUBLIN ART AND TECHNOLOGY ASSOCIATION (DATA) — JUL. 2012

A NATIONAL CALL TO SHOWCASE EMERGING TALENT AND PROVIDE A PUBLIC PLATFORM FOR INNOVATIVE PROJECTS HAPPENING ACROSS ART, DIGITAL MEDIA, TECHNOLOGY AND INTERACTIVE DESIGN. THIS WAS A COMPETITIVE PROCESS WITH SEVEN PLACES FOR WHICH I WAS SELECTED. PRESENTATION INCLUDED DEVELOPMENT OF A SPATIAL APPLICATION INFORMED BY PSYCHOACOUSTIC RESEARCH.

PLYMOUTH COGNITION DEPARTMENT. 2ND AUDITORY COGNITION SUMMER SCHOOL SELECTED TO PARTICIPATE FROM AN EU WIDE CALL FOR RESEARCHERS IN THE DOMAINS OF PERCEPTUAL RESEARCH THAT INCLUDED MACHINE LEARNING, MUSIC COGNITION, AUDITORY COGNITION AND CREATIVE PRACTICE. AN INTENSIVE TEN DAY SUMMER SCHOOL DEALING WITH THE AFOREMENTIONED AREAS INCLUDING LECTURES ON NEUROPSYCHOLOGY. I LED A GROUP PROJECT THAT WAS AWARDED BEST PRESENTATION OF THE SCHOOL.

PLYMOUTH, UK — MAY 2012

> FUNDING

RECEIVED FUNDING £2,000 FROM LANCASTER UNIVERSITY FOR 'RESEARCH-IN-A-BOX' COMMISSION. THIS INVOLVED THE DEVELOPMENT OF AN ONLINE LEARNING SPACE FOR THE WOMEN IN SOUND WOMEN ON SOUND ORGANISATION TO EDUCATE YOUNG PEOPLE IN THE AREA OF MUSIC TECHNOLOGY. THIS CAN BE VIEWED HERE; [HTTP://WISWOS.COM/RESEARCH.PHP](http://wiswos.com/research.php)

— AUG 2017

RECEIVED FUNDING, €22000, FROM THE IRISH RESEARCH COUNCIL TO EXPLORE SPATIAL AUDIO TECHNIQUES IN COMPOSITION. THIS LED TO THE DEVELOPMENT OF AN APPLICATION TO MIX THE SPECTRAL PARTIALS OF SOUND IN AN IMMERSIVE ENVIRONMENT.

— OCT 2011

RECEIVED FUNDING €3500 FROM CULTURE IRELAND TO DEVELOP ORIGINAL COMPOSITIONS IN COLLABORATION WITH WORLD RENOWNED GROUP ENSEMBLE MODERN COLLECTIVE AT THE TOKYO WONDER SITE, JAPAN. THIS CULMINATED IN A COLLABORATIVE COMPOSITION PERFORMED AT THE TOKYO WOMEN'S PLAZA VENUE.

TOKYO, JAPAN — OCT 2011

> INVITED SPEAKER/EVENTS

NAVIAR HAIKU FEST IN LONDON OCTOBER 2018

PART OF A PANEL DISCUSSION ABOUT ONLINE CREATIVE COMMUNITIES REPRESENTING THE WISWOS ORGANISATION AND TALKING ABOUT OUR ONLINE SPACE FOR LEARNING AND THE LOANABLE RESEARCH KIT FOR EDUCATING ABOUT MUSIC TECHNOLOGY.

GUEST SEMINAR AT BEIJING FOREIGN STUDIES UNIVERSITY JULY 2017

SEMINAR ON THE USE OF SONIC PI FOR LIVE CODING IN SOUND AND MUSIC

[HE]ARTS OF STEM FESTIVAL — FEB. 2016

INVITED TO PRESENT AND DEMONSTRATE DOCTORAL RESEARCH. HELD AT ULSTER UNIVERSITY'S BELFAST AND MAGEE (DERRY/LONDONDERRY) CAMPUSES AND FABLAB NI (NERVE CENTRE, DERRY) AS PART OF THE 2016 NI SCIENCE FESTIVAL.

ACOUSTIC ECOLOGY AND SOUND RECORDING RESIDENCY — SUMMER 2016

IN AUGUST 2016 RAN A SONIC ARTS RESIDENCY WITH SOUND ARTIST LINDA O KEEFFE IN THE LA FATARELLA MUNICIPALITY IN THE NORTHERN TERRA ALTA OF SPAIN. WE GUIDED PARTICIPANTS IN FIELD RECORDING AND POST PRODUCTION METHODS.

> PROFESSIONAL MEMBERSHIP

EDITOR AND JOURNAL MANAGER FOR THE INTERFERENCE JOURNAL 2014-PRESENT

A JOURNAL OF AUDIO CULTURES - [HTTP://WWW.INTERFERENCEJOURNAL.ORG](http://www.interferencejournal.org)

MEMBER AND WEB MANAGER OF WISWOS 2015 - PRESENT

THE WOMEN IN SOUND WOMEN ON SOUND ORGANISATION - [HTTP://WWW.WISWOS.COM](http://www.wiswos.com)

MEMBER AND WEB MANAGER OF ISSTA - 2013-2016

THE IRISH SOUND, SCIENCE AND TECHNOLOGY ORGANISATIONS - [HTTP://ISSTA.IE](http://issta.ie)

MEMBER OF AES - 2015-2016

THE AUDIO ENGINEERING SOCIETY - [HTTP://WWW.AES.ORG](http://www.aes.org)