

# Dr Charlie Mydlarz

---

## Education

- May 2013 **PhD in Soundscape research utilizing mobile technologies**, *University of Salford*.
- Jun 2007 **BSc Honours in Audio Technology**, *University of Salford*.  
1<sup>st</sup> class honours
- Oct 2006 **Diploma in Professional Studies**, *University of Salford*, Distinction.
- Jul 2002 **A2 levels**, *Peter Symonds College*, Computing (B), Physics (C) & Mathematics (D).

---

## Experience

- Sept 2016 - **Senior Research Scientist**, *NYU CUSP*.
- Present Sounds Of New York City - SONYC project - mapping the soundscape of NYC  
Includes the development, implementation and deployment of accurate, low cost acoustic sensing devices for sound and noise sensing at city scale. This work is part of the NSF funded Sounds Of New York City (SONYC) project.
- Oct 2013 - **Post Doctoral Associate**, *NYU CUSP*.
- Sept 2016 Sounds Of New York City - SONYC project - mapping the soundscape of NYC  
Working on the development and implementation of cyberphysical systems for large scale, high resolution soundscape data capture from urban environments.
- Jan 2013 - **Research Assistant**, *University of Salford*.
- Jun 2013 Framework for Innovation and Research in MediaCityUK (FIRM), Hyperlocal TV research project  
Running a short term research project investigating hyperlocal TV services, with a particular focus on sports coverage. The project is partnered with BT, and a number of local charities and media organisations. The main aim is to gauge audience appreciation towards hyperlocal content and the ways in which they consume it.
- Feb 2010 - **Research Technician**, *University of Salford*.
- Jun 2012 EPSRC project: ISESS “Identifying a Sound Environment for Secondary Schools”, investigating the effects on teaching and learning of different acoustic designs within secondary schools and classrooms.
- Developing cognitive tasks using E-Prime, Visual Basic, C#, MS-DOS
  - Carrying out acoustic testing within UK secondary schools
  - Planning and delivering lessons for KS 3-4 students involving acoustics
  - Running studies with school groups across the country
  - Analyzing and collating multivariate acoustic, environmental and cognitive data
  - Disseminating findings in international peer reviewed journals
- Sep 2007 - **Assistant Lecturer**, *University of Salford*.
- Jun 2012 Assisted in the teaching & marking of: C# Application Programming, XNA Games Programming for AVT & Mathematics for AVT

Sep 2007 - **Research Assistant**, *University of Salford*.

Sep 2009 EPSRC PPE project: IMPRINTS “Internet and Mobile Technologies for a Public Role in Noise Surveying”

- Developing project web and iOS applications using: Objective C, MySQL, Matlab, C#, J2ME, XNA, XML Web Services
- Producing web content using: HTML, Flash, Javascript, PHP, ASP.NET
- Creating promotional material to publicize the project
- Running pilot studies in local schools promoting the science behind the project as well as refining methodologies
- Audio feature extraction implementation
- Managing project expenditure and budget
- Acoustic and statistical analysis of environmental recordings and subjective responses from a large data set
- Reviewing existing methodologies in the field for comparative analysis

Jul 2005 - **Service Engineer**, *HHB Communications*, London.

Aug 2006 Placement position in a busy service department

- Sole responsibility for servicing and repairing a wide range of professional audio equipment in a highly demanding team environment
- Handling of administration and processing of repairs including all necessary paperwork
- Providing phone and e-mail technical support for professionals in the industry
- Running and troubleshooting all CD media testing & evaluation for the company

---

## Doctoral Thesis

Title *Application of novel techniques for the investigation of human relationships with soundscapes*

Supervisors Dr Ian Drumm, Prof Trevor Cox

Description The design, development, use and validation of a novel method for soundscape research utilizing mobile & internet technologies & mass participation, citizen science field studies

---

## Bachelor Thesis

Title *Design & Implementation of an Intuitive Graphical Interface for Timbre Manipulation*

Supervisors Dr Ben Shirley

Description An intuitive sound synthesis environment, with timbre manipulated using an abstract three dimensional Cube space, programmed in C++ and Visual Basic using DirectX 3D visualizations

### Bachelor Modules

High level programming

Acoustics

Psychoacoustics

DSP

Room acoustics

Analogue electronics

Electroacoustics

Digital audio

---

## Other Projects

Public engagement & outreach

Oct 2011 Manchester Science Festival - Created and ran an event in the Salford Lads Club on the science of sound

Oct 2011 Bright Club Manchester - Gave a number of talks to the public about the science of sound

Oct 2010 Manchester Science Festival - Created and ran an event on the BBC big screen engaging the public with the science of sound

- Aug 2010 Green Man Festival - Created and ran an event in Einstein's Garden educating children about the science of sound and bicycle based music
- Oct 2009 Manchester Science Festival - Created and ran an event on the BBC big screen engaging the public with the science of sound
- Oct 2008 - The Crescent Network - Co-Founded a network to support and encourage early career researchers
- Jun 2011 to undertake public engagement
- Sep 2008 RCUK Perspectives Poster Competition - Finalist in poster competition exploring the social implications of my PhD work

---

## Publications & conferences

- Publications Comparison of environmental and acoustic factors in occupied school classrooms for 11-16 year old students - Building & Environment - 2012
- Blind estimation of reverberation time in classrooms and hospital wards - Applied Acoustics - 2012
- Conferences Application of novel techniques for the investigation of human relationships with soundscapes - Internoise Osaka - 2011
- Classification of soundscapes using a novel mobile and internet methodology - Internoise Ottawa - 2009
- Internet and mobile technologies for a public role in noise surveying - ASA Paris - 2008
- Involving the public in noise surveys via mobile technology - IOA Reading - 2008

---

## Computer skills

- Intermediate C++, C, Fortran, Latex
- Advanced Objective C, Python, Javascript, PHP, Matlab, C# , XNA, HTML, Java, SPSS Syntax
- Tools XCode, Matlab, SPSS, JQuery, Notepad++, MySQL, Adobe Master Collection, Audition

---

## Other training

- Research methodologies
- Research ethics
- Media communication for print and broadcast
- Public communication
- Statistical analysis
- Child protection
- Graphic design
- Fully CRB checked

---

## Qualities

- Personal skills: I am an enthusiastic and motivated person and immerse myself in whatever I do. I work well independently but also enjoy being part of a team. I have a long standing interest in technology and since I was a child I have had a desire to understand how things work and interact. I am a keen cyclist, climber & swimmer and enjoy meeting people. I am also a keen traveler, having spent five months traveling the world in 2003.
- Experience with: A wide range of programming languages, application development, usability studies, research methods, subjective testing, database creation and management, public engagement, acoustics, public relations, web development & design, graphic design
- References: Available on request