# Dr Thomas James Mitchell

Audio Software Engineer Bristol, UK

## Curriculum Vitae

www.teamaxe.co.uk teamaxe@hotmail.com

## Profile

A motivated, organised and methodical audio software engineer with more than 9 years' design and development experience. A lifelong interest in music and a PhD in Computer Science combine to ensure competency, high productivity and a deep awareness of the technical and creative dimensions of the audio industry.

## Expertise

Languages: C, C++, Python, Java, Max/MSP, Pd, Visual Basic, HTML, CSS, javascript, C#

Tools: JUCE, GIT, SVN, Doxygen, LATEX, Open Sound Control, Arduino, Processing, OpenFrameworks, MatLab, GTK+, LabWindows<sup>TM</sup>/CVI, Wordpress, JSON, XML

Operating Systems: MacOS X, Linux, UNIX, Windows

Applications: Xcode, Visual Studio, OpenOffice, MS Office, Final Cut Pro, Omnigraffle, Illustrator

Audio: Digital signal processing, audio engineering, composition, performance and production

Miscellaneous: Strong verbal/written communication, presentation, problem solving and teams skills

# **Employment**

### University of the West of England

Senior Lecturer

Bristol, UK 2009 - present

Acting Associate Head of Department

November 2016 - January 2017

Lecturer

2007 - 2009

- Fundraising for academic research, (raising over £350k since 2010)
- Managing and organising teaching teams and acting as Associate Head of Department during recruitment periods, supporting, representing and leading a team of 27 staff
- Supervision of 3 PhD and 4 MSc students; examination of 2 PhD and 6 MSc theses
- Curriculum design, development and leadership of MSc Music Technology and MSc Creative Technologies and major contributions to a range of undergraduate Music Technology programmes. Subject expertise in software design and development, DSP, HCI, machine learning, artificial intelligence, interactive art/music systems
- Publishing 22 manuscripts in international journals or conferences since 2010
- Forming research partnerships and running high-profile projects including: www.danceroom-spec.com, www.mimugloves.com, www.phona.co.uk, www.transmission.org, www.secretlivesofbooks.org

#### **Tracktion Software Corporation**

Washington, US

Consultant, Software Developer

2014 - 2015

Working closely with the development team designing, developing testing and maintaining algorithms, features and updates for the Tracktion Digital Audio Workstation (DAW) www.tracktion.com

Phona Ltd. Bristol, UK

Co-founder, Consultant, Developer

2014 - 2017

- Leading and managing technical developments at Phona Ltd. an audio visual software development company focusing on mobile platform applications for voice training
- Responsible for product design/development, fundraising, project management, client liaison, build and release management

## Beardyman Management Ltd.

Consultant, Software Developer

June 2013 - September 2013

- Contributing to the BeardyTron live looping performance application
  - Design, development, testing and maintenance of software features and application updates

Mimu Ltd. London, UK

Co-founder, Consultant, Developer

January 2013 - present

London, UK

- Development of the originating IP on which the company was formed including the user-centred development of all software components: GUI, signal processing/conditioning, machine learning algorithms, human factors, network, MIDI and wireless interfacing
- Responsibilities: software design/development, fundraising, stakeholder liaison, product design development in collaboration with designers and clients

x-io Technologies Bristol, UK

Consultant, Engineer

May 2011 - present

- Software/firmware development for embedded motion sensors
- Co-design, development, fundraising and publicity for x-OSC: a wireless interface for interactive multimedia applications

#### GE Inspection Technologies (formerly Hocking NDT)

St. Albans, UK

Software/Design Engineer

Sept 2001 - Aug 2003

- Design and embedded development of commercial handheld non-destructive testing devices and applications
- Application and DSP software development in C
- Assistance with sales visits and client liaison

#### **HHB Communications Ltd**

London, UK

Engineer (Student Placement)

Jun. 1999 - Jul. 2000

- Development of audio test and analysis scripts/procedures
- Testing of prototype products for commercial release
- Servicing, fault finding and repair of professional electronic audio devices

## Education

University of The West of England	Bristol, UK
Fellow of the Higher Education Academy	2015
PhD, Computer Music	2003 - 2010
PGCertHE (with Distinction)	2007 - 2008
BSc (Hons) Music Systems Engineering (1st Class)	1997 - 2001

### Composition

#### Discography

Teamaxe + Ipam Belf, Get the calw e.p., Massive Advance	2002
T-maxx, Wellcome to Celebrity, Spymania	1999
Mould, Fluffy effort on Various Artists Mealtime, Planet Mu	1997
Mould, Holily's Theorum on Various Artists SpunkJazz, iLL	1997

#### References

Martin Robinson, Spitfire Audio Ltd. martin@spitfireaudio.com