Al for Music in the Creative Industries of China and the UK

Dr. Nick Bryan-Kinns

Queen Mary University of London

<u>n.bryan-kinns@qmul.ac.uk</u>

http://ai4music.eecs.qmul.ac.uk

# Funding

The UK Arts and Humanities Research Council (AHRC) has secured £5m for a major new international programme:

- Develop research-industry partnerships
- Between the UK and China
- In the creative industries

The workshops on AI for Music in the Creative Industries of China and the UK form part of this initiative









## Context

AI is a key element of both UK and Chinese national strategies

Digital music market is now the largest segment of the global Music Industry

Global revenue of \$9.4bn, representing 54% of the industry's total revenue

UK is a leader in Music Industries

Rapidly changing Chinese sector

32% growth in digital music from 2016 to 2017.







## Al for Music in Creative Industries

Music industry, Screen industries, Theatre and performing arts, and Gaming Parallels across Creative Industries e.g. automation Music Industry's use of AI foreshadows others









# Challenges

Substantial skills shortage in Al.

Fear and lack of understanding of the role of AI.

Closed data sets and data regulation.

Lack of ethics on products of AI creativity.

Difficulties for SMEs and individual creative practitioners to exploit AI.

Lack of business models to effectively exploit AI in Creative Industries.









# Opportunities

Hybrid methods which blend AI with human creativity.

Shared data sets between companies and countries to improve AI reliability and creativity.

Skills training to address the skills shortage.

New business models which monetize AI beyond automation.

Cross-Cultural use of AI to customize experiences, services, and content to local cultures.









## Aims

Identify industry-led challenges for better exploiting AI for Music in the Creative Industries.

Build industry-research partnerships and UK-China partnerships.

Identify routes to sharing between countries and access to markets, technologies, and platforms.









# Questions: Landscape

What does the current landscape of AI for music look like in UK and China?

How is AI used differently for music in the UK and China?

How can AI support music generation in the Creative Industries?

What can be learnt from AI for music and what are common challenges and responses to AI across Creative Industries?









## Questions: Data and IP

How might data sets be shared, or bridged, across sectors, countries, and cultures?

How might massively available music content affect other Creative Industries and workflows?

How will IP, rights and business models be affected when content is produced by and through AI?









## Questions: Skills and Business

What skills are needed to make the most of AI for music in Creative Industries?

What is the role of the composer and designer when AI is involved in the creative process?

What are business models for AI for music, and how might these be applicable across the Creative Industries?









# Questions: Impact of Al

How can we measure the impact of AI on:

- the Music Industry
- **Creative Industries**
- and creative practice?
- How do we value people's engagement with AI?

How do we evaluate people's acceptance of AI generated content?









#### Project Team

Queen Mary University of London, UK Dr. Nick Bryan-Kinns, Dr. George Fazekas, Dr. Johan Pauwels Tongji University, China Professor Sun Xiaohua, Dr. Wang Qi, Jan Dornig

## Workshops

#### Shanghai Workshop: 15-17 April 2019 London Workshop: tbc (June)









# Longer Term Aims

Identify industry-led challenges for better exploiting AI for Music in the Creative Industries.

Build industry-research partnerships and UK-China partnerships.

Identify routes to sharing between countries and access to markets, technologies, and platforms.

Develop funding proposal for AHRC £5m major new international programme to develop research-industry partnerships between the UK and China in the Creative Industries









Al for Music in the Creative Industries of China and the UK

AHRC AH/T001259/1