

# **Candidate Information**

Position: Research Fellow in Digital Musical Instrument Ecology

School/Department: School of Arts, English and Languages

**Reference:** 19/107643

Closing Date: Wednesday 31 July 2019

Salary: £33,199 to £39,610 per annum (potential to progress to £43,266 per annum

through sustained exceptional contribution)

Anticipated Interview Date: Wednesday 21 August 2019

**Duration:** 6 months

### **JOB PURPOSE:**

The successful applicant will be an active member of the research project/team investigating the theoretical and practical processes by which digital musical instruments (DMIs) may become part of musical ecologies, in particular the factors which influence how musicians discover the properties of DMIs and learn to skilfully play them. The project will involve conducting and analysing experiments to investigate exploration and technique acquisition with different novel DMI prototypes. This investigation is placed within the broader research context of developing a theoretical framework to guide design principles which are more likely to lead to successful adoption of DMIs in musical cultures and practices.

The following describes the type of work that is typically required of research staff at this level. This list of duties is indicative of the tasks likely to be undertaken, and will be carried out in conjunction with the wider research team. The Research Fellow will work full-time on the project for six months.

#### **MAJOR DUTIES:**

- 1. Undertake research on the project under the supervision of the Principal Investigator (PI) and Co- Investigators (Co-Is).
- Carry out experiments with human participants (musicians) to investigate exploration and learning of different novel DMI
  prototypes, including refining experimental designs, participant recruitment, data collection and analyses, and interpretation of
  results
- 3. Present regular progress reports on research to the PI, Co-I and research team and to external audiences to disseminate and publicise research findings.
- 4. Prepare, in consultation with the investigators, material for publication in peer reviewed journals and presentations at international conferences.
- 5. Carry out routine administrative tasks associated with the research project to ensure that the project is completed on time and within budget. These include organisation of project meetings and documentation, and risk assessment of research activities.
- 6. Undertake comprehensive library and internet searches for published research literature relevant to the project.
- 7. Engage in regular discussions with the project investigators to develop the theoretical framework relevant to the project's broader aims, based on experiments and relevant research literature.
- 8. Assist with the organisation of the workshop related to the project.
- 9. Assist with the open access dissemination of data associated with the project, e.g., website, information sessions, non-academic outputs, etc.

# **Planning and Organising:**

- 1. Plan and organise experiments, dissemination events and regular meetings with the research team.
- 2. Plan own day-to day activity within framework of the agreed research programme.
- 3. Plan in advance to meet deadlines for completing experimental data collection and analyses, journal publications and to prepare presentations and papers for conferences.
- 4. Coordinate and liaise with other members of the team over work progress.

#### **Resource Management Responsibilities:**

- 1. Ensure research resources are used in an effective and efficient manner.
- 2. Provide guidance as required to support staff and other RAs/students who are active in related research projects.

# **Internal and External Relationships:**

1. Liaise on a regular basis with colleagues, stakeholders and the research team.

### **ESSENTIAL CRITERIA:**

- 1. Completed PhD in relevant field (e.g. Psychology, Music, Engineering).
- 2. Experience of conducting research collecting and analysing data from human participants.
- 3. Demonstrable awareness of, and willingness to participate in, interdisciplinary research spanning different disciplines relative to the position.
- 4. Ability to assess and organise resources effectively.
- 5. Ability to work independently with minimum supervision.
- 6. Ability to communicate complex information orally and in writing clearly.

### **DESIRABLE CRITERIA:**

- 1. Proven ability to write high quality academic publications.
- 2. Experience performing with digital musical instruments.
- 3. Experience designing and prototyping digital musical instruments.
- 4. Understanding of relevant theoretical concepts (e.g. embodied cognition, enactivism, ecological psychology, skill acquisition).
- 5. Familiarity with sound synthesis algorithms.
- 6. Experience using intergraded digital tools in a research context.