School of Media, Film and Music - Department of Music
Software Developer (Fixed term for 13 weeks, full time 1.0 FTE)
Salary range: starting at £32,004 and rising to £38,183 per annum. It is normal to appoint at the first point of the salary scale.
Expected start date: As soon as possible.

An exciting new position has become available in the Department of Music at the University of Sussex, to work on the release of mobile software for the NETEM project.

NETEM ('Networking Technology and the Experience of Ensemble Music Making') is an Arts and Humanities Research Council funded project, exploring synchronised digital notations for musical ensembles. We have developed a mobile app that helps less experienced musicians to follow musical scores in group music-making environments. This software is now being developed into a commercial product in collaboration with the Sussex Innovation Centre. The key duty of the applicant will be to develop our research prototype into a product that is suitable for release on IOS and Android app stores.

Applicants will be involved in a variety of tasks:
- specification of software architecture
- programming new app features
- testing and optimisation for mobile platforms
- user interface development
- testing the software with musical ensembles

Ideal candidates would have experience with the technical aspects of one or more of the following areas:
- user interface design and programming
- programming in c++
- bluetooth 4 networking technology
- IOS and Android development
- user testing
- app development in the field of music, sound or interactive systems

We seek a highly organised and motivated individual able to multi-task and work independently with minimal supervision while maintaining excellent attention to detail and bring energy and enthusiasm to a vibrant department.

Employment will be subject to the right to work in the UK. You will work directly with Dr. Kiefer and the NETEM team, with a base in the Department of Music. You can find more information about the project at http://netem.org.uk/

For informal enquiries, please contact Dr Chris Kiefer (c.kiefer@sussex.ac.uk, +44 (0)1273 877484)

Closing date for applications: 18 January 2017

For full details and how to apply see www.sussex.ac.uk/jobs

The University of Sussex is committed to equality of opportunity
2. **Senior leadership and management**

The Vice-Chancellor (Professor Adam Tickell) is the senior academic officer and, as Chief Executive, is responsible to the University Council for management of the University. He is supported by an executive group which includes the three Pro-Vice-Chancellors, the Registrar and Secretary, the Director of Finance and the Director of Human Resources. The Heads of the Schools of Studies at Sussex report to the Pro-Vice-Chancellors.

The Registrar and Secretary heads the Professional Services of the University. In addition, under the University Statutes, the Registrar and Secretary is Secretary to the University Council. The Director of Finance reports to the Vice-Chancellor. The Director of ITS reports to the Registrar and Secretary, and the Librarian reports to one of the Pro-Vice-Chancellors.

3. **The School of Media, Film and Music**

The School has a firmly established reputation for excellence in both teaching and research. Sussex saw its first undergraduate programmes in Media Studies introduced in 1987. Today we offer single honours programmes in Film Studies, Media and Communication, Media Practice, Music, Music Technology and Journalism. We also offer Joint degrees in Film Studies, Media Studies, and Cultural Studies. In addition, members of the Department contribute to interdisciplinary programmes in Gender Studies. Media and Film is regularly rated among the top departments in league tables: we were ranked in the top 10 places to study in the UK in *The Times Good University Guide 2013*, in the top 15 in the UK in *The Sunday Times University Guide 2012* and *The Complete University Guide 2014*, in the top 25 in the UK in *The Guardian University Guide 2014*, and in the top 100 in the world for communication and media studies in the *QS World University Rankings 2013*.

The School currently has over 700 students on its single honours and joint degree courses, and some 200 on taught postgraduate courses. Over eighty registered doctoral students work in a rich and dynamic research culture. A programme of staff research seminars runs weekly throughout the academic year, bringing together academic staff, PhD students, and MA students, and there are also seminars, research groups and research symposia organised specifically by and for doctoral students.

The School offers MAs in Media & Cultural Studies, Digital Media (theory and practice), Gender and Media, Film Studies, Digital Documentary, Media Practice for International Development, and Filmmaking and Music and Sonic Media. In all, these degrees attract some 200 students per year, of whom the majority are full time. Journalism offers four taught MAs in Journalism: MA Multimedia Journalism (NCTJ accredited); MA International Journalism; MA Journalism and Media Studies; and MA Journalism and Documentary Practice.

The School offers a varied programme of interdisciplinary research events addressing a wide range of topics. For doctoral students, in addition, the University’s Doctoral School also offers an extensive programme of study and professional development skills training. For students engaged in creative practice there are state-of-the-art facilities and highly experienced technical support staff.

Media students are offered an exciting and supportive context in which to pursue academic and creative study: to explore how the media in all their forms (as technologies, institutions, practices and texts) figure in modern life. Undergraduate
students develop analytical and creative skills, and to work individually and collaboratively towards the highest standards of achievement.

Cultural Studies students are invited to understand the power of culture – both the culture we live in and the cultures of other people. Undergraduate students explore how themes such as gender, race, sexuality, class and religion shape and are shaped by culture. Students examine cultures of work, of leisure and lifestyle, of production and of consumption.

Film is an exciting and diverse areas of media production and consumption today, operating at a local, national and global scale. Undergraduate students are encouraged to develop their own interests, combining theory and practice, while exploring comedy, art film, or documentary cinema. Students are invited to make video essays alongside traditional written analysis, helping students to broaden their understanding of film and develop communication skills. Postgraduate study takes a distinctive approach to this medium by exploring global manifestations of film (including Hollywood), and examining its cultural, economic, aesthetic and ideological operations.

Media Practice Undergraduate students develop practical skills alongside a knowledge of communication, media and cultural forms. These enable students to interpret and produce media that makes an impact. Students gain a critical understanding of the global media landscape, and the tools to contribute to it.

Music at Sussex has a distinctive philosophy at the forefront of creative music: to practice and study music in its social, cultural, historical and technological contexts. Music has an internationally recognised focus on creativity in contemporary music, embracing performance, composition, music theatre and popular music studies, as well as critical and creative approaches in music production and innovation in music technology, including new interests in music and sound for interactive media, games and apps. Strengths are reflected in the work of current and former staff which include numerous distinguished composers, theorists and writers on music such as Jonathan Harvey, and David Osmond-Smith. Today, Music has seen considerable expansion in teaching and research staff following the addition of new courses including BA in Music Technology, and MA in Music and Sonic Media.

Research

Research in the School of Media, Film and Music includes work on media theory, journalism, film studies, critical media practice, music and music technology, opera and music theatre, robotics and sound, social and cultural theory, cultural studies, media sociology, the history of auditory and visual culture, digital culture, technology and innovation, new media theory, consumer culture, feminism, media history and documentary, and film studies. PhD students are working in all these fields.
Five Research Centres support the subject areas: the Centre for Material Digital Cultures, the Centre for Research in Opera and Music Theatre which runs a range of research projects and events, some of which are in collaboration with partner institutions such as Glyndebourne Opera, the Sussex Centre for Cultural Studies, the Centre for Visual Fields, and the Centre for Life History and Life Writing Research.

Music at Sussex is recognised both nationally and internationally for its excellent and innovative research. Research is organised around a number of key fields, which include: Critical Musicology, Popular Music Studies, Acoustic and Digital Composition, Composition for Screen, Opera and Music Theatre (history, theory and practice), Performance Theory and Practice, Sound Studies, New Instruments. PhD students are working in all of these fields.

The Sussex Humanities Lab (SHL) is a cross-School research project that has a major presence in MFM. SHL has a dedicated research space within the Silverstone Building involving research teams made up of post-doctoral and early-career researchers, and senior faculty organised into four connecting strands – Digital history/digital archives; Digital media and computational culture; Digital technologies and digital performance; and Digital lives, memories and experience. The SHL organises and supports the development of teams able to deliver major digital research projects, mount successful funding bids, to engage with and build networks of practitioners, publish and disseminate new knowledge and to intervene in, and shape the emerging fields of the digital humanities. Key goals of the programme are to enable innovative work in the digital humanities, capture major funding to expand research capacity and to ensure that these gains become sustainably rooted in the University.

The School also maintains the Music Informatics and Performance Technologies Lab, where research is conducted with members from across the School of Media, Film and Music, and from the Informatics Department. And it supports the Public Culture Hub which generates projects in relation to activism, sound and other public culture issues.

Media, Cultural Studies and Journalism staff
Media and Cultural Studies colleagues undertake social research, explore the history and contemporary development of media systems, consider their aesthetics, their role in public culture and the social world, their everyday use, and their possible future shape.

Judy Aslett, Teaching Fellow in Journalism.

Caroline Bassett, Professor of Media and Communications. Research interests include: narrative and hypermedia; gender; subjectivity and new technology; digital cultures/virtual spaces; and the politics of emerging media systems.

David Berry, Reader in Media and Communications. Research interests include critical theory, medium theory, software studies, digital humanities, and the materiality of computation.

Michael Bull, Professor of Sound Studies. Research interests include: new media, including ethnographic study of their use; sound and experience; the Frankfurt School.

Xiaojin Chen, Lecturer in Journalism. Research interests include Internet research, China studies, collective action and democracy, citizen engagement, and activism in China. She is also interested in researching media in transition in the digital age, focusing on UK media, Chinese media, and media industries in a global context.
Simi Dosekun, Lecturer in Media and Cultural Studies.

Katherine Farrimond, Lecturer in Media and Cultural Studies. Research interests include: crime fictions, cultural studies, Feminist theory, Film, film noir, Gender and Sexuality, genre, girlhood, Gothic, horror, Media, Nostalgia, popular culture, representation, retro and vintage, science fiction, television, The body, virginity.

Beatrice Fazi, Research Fellow in Digital Humanities and Computational Culture. Research interests include the abstract character of computational systems, and the ways in which the computational method might produce new forms of intelligibility whilst also challenging present and past accounts of sensibility.

Ivor Gaber, Professor of Journalism. Research interests include journalism, and social media and news impact.

David Hendy, Professor of Media and Communications. Research interests include broadcasting history, radio and sound studies.

Ben Highmore, Professor of Cultural Studies. Research interests include: the history and theory of everyday experience and, within this, forms of life writing. Current research is focused on domestic habits and routines, changes in work culture, and the aesthetics of daily experience.

John Hondros, Teaching Fellow in Media and Communications.

Malcolm James, Lecturer in Media and Cultural Studies. Research interests include: postcolonialism, race and racism, urban and youth cultures.

Coral James O’Connor, Teaching Fellow in Journalism. Research interests include multimedia journalism and its impact and development, social media, online voting and politics and the representation of black people in the media.

Margaretta Jolly, Reader in Cultural Studies. Research interests include oral history, life histories and writing, feminist history.

Tim Jordan, Professor of Digital Cultures. Research interests included information politics, digital industries, hacking, hacktivism and social movements.

Tanya Kant, Lecturer in Media and Cultural Studies.

Kate Lacey, Senior Lecturer in Media Studies. Research interests include: history of the mass media; radio and cinema in Germany to 1945; gender issues and the media; listening publics.

Paul Lashmar, Senior Lecturer and investigative journalist. Research interests include anti-corruption, computer aided reporting, data journalism, digital heritage, intelligence agencies, investigative journalism, mass surveillance, mugshots, organised crime, terrorism and political violence.

Eleftheria Lekakis, Lecturer in Media and Communications. Research interests include consumerism and cultural citizenship, social media, citizenship and consumerism, neoliberalism and its subjectivities.

Sarah Maltby, Senior Lecturer in Media and Communications. Research interests include military media management, war, memory and the media, media, war and conflict.

Andy Medhurst, Senior Lecturer in Media and Cultural Studies. Research interests include: British cinema, 1945-60; popular television genres; film and television comedy; masculinities in the media; lesbian and gay studies.
Monika Metykova, Lecturer in Media and Communications. Research interests include: changing European media landscapes and policies, transnational media practices, European media and political communication.

Sharif Mowlabocus, Senior Lecturer in Media Studies. Research interests include: the field of digital media and specific focus located at the intersection between queer studies and digimedia studies.

Sally Munt, Professor of Media and Cultural Studies. Research interests include: cultural space and spatial theory, shame, social class, and sexuality.

Kate O’Riordan, Reader in Media and Film. Research has included work on gender and gaming, web cameras, medical imaging, art and digital design. She has also published on sexuality and technology and the ethics of internet research.

Ben Roberts, Lecturer in Digital Humanities, Computational Culture.

Pollyanna Ruiz, Lecturer in Media and Communication. Research interests include: cultural theory, digital culture, political communication, political protest, the public sphere and public places.

Ping Shum, Teaching Fellow in Journalism.

Lyn Thomas, Professor of Cultural Studies. Research interests include: narratives of class migration; media audiences; 'quality' media and fan cultures; radio soap opera and radio audiences online; the relationship between religion, spirituality and media in contemporary Britain.

Robert Topinka, Lecturer in Media and Cultural Studies.

Victoria Walden, Teaching Fellow in Media.

Alban Webb, Lecturer in Digital Humanities. Research interests include the BBC: the cold war, the World Service.

Janice Winship, Reader in Media and Cultural Studies. Research interests include: popular history/memory and constructions of feminine sexuality; consumption and the culture of shopping; design, material culture and everyday life; women's magazines; advertising.

**Film Studies staff**

Thomas Austin, Senior Lecturer in Media and Film. Research interests include: contemporary Hollywood; reception studies and popular audiences for film; screen documentary.

Katie Grant, Senior Lecturer in Film Studies. Research interests include: Digital media object relations, including research by practice, film directing in contemporary world cinema, and recognition as concept, practice, motif, and scene in films and other audio visual culture.

Frank Krutnik, Reader in Film Studies. Research interests include: comedy, film noir, US cinema and popular culture.

Michael Lawrence, Lecturer in Film Studies. Research interests include: Indian cinema, the child in film, world cinemas.

Alisa Lebow, Reader in Film Studies. Research interests include: documentary, first-person filmmaking, exilic/diasporic cinema, activist media and globalization, gender and sexuality in representation.
Despoina Mantiziari, Teaching Fellow in Film Studies. Research interests are located in the area of feminism and film. In particular, women’s film authorship has been a central focus in my research activity, and I have explored the area of global art cinema for the articulation of feminism on a transnational level. My research more generally examines issues of gender and representation within contemporary film cultures.

Matilda Mroz; Lecturer in Film Studies. Research interests include: how international and transnational film and new screen media reconfigure our relationship to memory and history, particularly in the context of Holocaust studies; how temporality and ‘matter’, both bodily and environmental, in screen media, and tracks the historical and emerging encounters with affect in celluloid film and digital media.

Niall Richardson, Senior Lecturer in Film Studies. Research interests include: Queer Cinema (especially Derek Jarman and Todd Haynes); the body (especially extreme bodybuilding, body manipulation and the grotesque); the representation of gender and sexuality in film and popular culture.

Luke Robinson, Lecturer in Film Studies. Research interests include: documentary in the People’s Republic of China, Sinophone cinemas, Chinese film festivals, the work of Wong-Kar Wai.

Sue Thornham, Professor of Media and Film. Research interests include: film, gender and sexuality, narrative, television drama.

Dolores Tierney, Senior Lecturer in Film Studies. Research interests include US and Latin American filmmaking, gender issues in classical Mexican melodrama, Mexican exploitation and contemporary Spanish horror film.

Lawrence Webb, Lecturer in Film Studies. Research interests include American cinema, cinema and architecture, cultural geography and space, Film History, Theory and Criticism, US cinema and popular culture.

**Media Practice staff**

Joanna Callaghan, Senior Lecturer in Filmmaking. Research interests include: fiction and documentary filmmaking, filmmaking and/as philosophy.

Cecile Chevalier, Lecturer in Media Practice.

Emile Devereaux, Lecturer in Digital Media Practice. Research interests include: the theory and practice of visual culture and media arts, and his practice work combines film, video, 2D/3D animation, performance and interactive/digital media.

Andrew Duff, Teaching Fellow, Digital Media.

Rachael Duncan, Teaching Fellow in Media Practice and Journalism.

Melanie Friend, Senior Lecturer in Photography. Research interests include: the area of documentary photography, the representation of conflict, refugees and migrancy.

Adrian Goycoolea, Senior Lecturer in Media Production. Work ranges from short, experimental, single channel pieces to multi-channel art installations, and he has most recently extended his range to short and feature-length fiction films and screenplays as well as documentaries.

Wilma de Jong, Lecturer in Media Production, specialising in theory and practice of video production. Research interests include: media and pressure groups, international public sphere, factual television, independent film production.

Yorgos Karagiannakis, Teaching Fellow in Video Production.
Mary Agnes Krell, Senior Lecturer in Digital Media. Research interests include: photographic narratives; inhabited space on the internet and in digital media; interactive installation; the investigation of digital semiotics; sacred spaces in interactive realms.

Paul McConnell, Teaching Fellow in Digital Media and Photography.

Micheál O’Connell, Teaching Fellow in Media Practice (Photography).

Jeremy Sheldon, Teaching Fellow in Media Practice (Filmmaking and Script Writing).

Martin Spinelli, Senior Lecturer in Radio Production. Research interests include: experimental radio and sound.

Lizzie Thynne, Senior Lecturer in Media Production. Producer of documentary, drama and experimental work. Research interests include: film-making, gender and sexuality in visual representation, photography, surrealism, television industries.

Paul Vincent, Senior Media Practice Teaching Fellow, Photography.

Music staff
Music colleagues are active researchers with international profiles, and whose composition, performance and research feed directly into teaching and regular on-campus events. Music has strong links with local and national arts institutions and businesses, including Glyndebourne and the Brighton Dome and Festival, encouraging students to work and collaborate equally with people outside the university as well as with other students in the school.

Alice Eldridge, Research Fellow in Digital Humanities, digital performance. Research interests include collaborations with conservation biologists investigating the potential for acoustic approaches to biodiversity assessment and with musicians to explore the use of networking technologies in ensemble music making.

Dylan Beattie, Teaching Fellow in Music Production.

Martin Butler, Professor of Music in 20th-century compositional techniques, improvisation and performance skills, music theatre.

Richard Elliott, Lecturer in popular music of the world, music and technology, music and memory, cultural and critical theory, music and media, technoculture, space and place, urban musicology.

Evelyn Ficarra, Lecturer in Music theatre, electro-acoustic composition, and collaborative work. Assistant Director of Centre for Research in Opera and Music Theatre.

Tim Hopkins, Research Fellow in digital media in relation to opera, opera as historic multimedia tradition, contemporary and historic opera and music theatre repertoire, dramaturgy.

Ed Hughes, Professor of Composition in Music, composition, composition with electronics, composition with film, ensemble performance with technology, music theatre and opera.

Chris Kiefer, Lecturer in Music Technology, computer-musician and researcher in the field of interaction design, specialising in musician-computer interaction and physical computing.
Sally Jane Norman, Professor of Performance Technologies, Sussex Humanities Lab Co-Director, leader of Digital Technologies/ Digital Performance strand; Performing Arts, Practice-based and transdisciplinary research, Scenography, Sonic Arts, Theatre History.

Thor Magnusson, Senior Lecturer in Music Technology. Research focusing on the impact digital technologies have on musical creativity and practice, explored through software development, composition, performance and writing. Currently working on a research project entitled Sonic Writing, which studies how instrument design, notation and phonography is reformed by digital media.

Nicholas Till, Professor of Opera and Music Theatre, Director of Centre for Research in Opera and Music Theatre. Research in contemporary and historical opera and music theatre, modernism/postmodernism.

Joe Watson, Teaching Fellow in Music. Joe has engineered and produced many commercial releases and has toured the world several times as part of the band Stereolab. He was awarded the Sussex European Institute François Duchêne grant in summer 2014.

Technical staff

A team of technical support staff provide additional support to staff and students in the School.
4. **Job Description**

**Job Title:** Software Developer  
**Grade:** 7  
**School:** Media, Film and Music  
**Department:** Music  
**Location:** University of Sussex Campus  
**Responsible to:** Dr Chris Kiefer

**Purpose of the post:**  
The position will involve a variety of tasks as part of a project that aims to develop new smell-based interfaces and widgets in the automotive and VR context. The post-holder will be mainly responsible for the specification of the software architecture, software design, user interface design and the software-hardware integration.

The post-holder will closely collaborate with Dr Kiefer and the NETEM team, as well as benefit from the team’s expertise in the design and development of interactive mobile software for musicians.

**Principle Accountabilities / Main tasks**

1. To develop the NETEM software from research prototype to commercial release, as part of an AHRC funded project  
2. To liaise closely with the other members of the team, to develop and design the software and user interface  
3. To maintain source code and document the software  
4. To test the software in a variety of scenarios

**Specific Duties**

1. Finish development of our IOS software, according to set specifications  
2. Port the IOS software to Android (within the OpenFrameworks system)  
3. Maintain the source code repository  
4. Optimise software performance across mobile platforms  
5. Testing of the software with musical ensembles  
6. Document the software  
7. Undertake fault-finding and bug fixing in response to incidents and problems  
8. Undertake tasks as identified by the assigned Project Manager

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or the level of responsibility entailed.

**Date**  December 2016
5. **Person Specification**

**UNIVERSITY OF SUSSEX**

Person Specification for the post of a **Software Developer and Designer**

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<thead>
<tr>
<th>SKILLS / ABILITIES</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Demonstrable skills in the development of software systems</td>
<td>X</td>
<td></td>
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<tr>
<td>Ability to design and build interactive systems and user interfaces</td>
<td>X</td>
<td></td>
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<tr>
<td>Skills in C++ programming</td>
<td>X</td>
<td></td>
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<tr>
<td>Ability to organize own work with minimal supervision</td>
<td>X</td>
<td></td>
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<tr>
<th>KNOWLEDGE</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Proven knowledge in one or more of the following areas: software design, interface design, threads and concurrent programming, programming interactive systems.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Interest in music and understanding of musical notation and Music XML (could be in experience – experience of performing notated music)</td>
<td></td>
<td>X</td>
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<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Experience of the development of interactive systems</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Experience of techniques for interface design</td>
<td>X</td>
<td></td>
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<tr>
<td>Awareness of approaches to participatory design</td>
<td></td>
<td>X</td>
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<tr>
<td>Experience of OpenFrameworks</td>
<td></td>
<td>X</td>
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<tr>
<td>Experience of designing and programming mobile applications (e.g., IOS, Android)</td>
<td></td>
<td>X</td>
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<thead>
<tr>
<th>QUALIFICATIONS</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>BSc in Computer Science or a closely related subject</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MSc in Computer Science or a closely related subject</td>
<td></td>
<td>X</td>
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<tr>
<td>PERSONAL ATTRIBUTES AND CIRCUMSTANCES</td>
<td>Essential</td>
<td>Desirable</td>
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<tr>
<td>Excellent communication skills</td>
<td>X</td>
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<tr>
<td>Ability to work in a multidisciplinary team with a view to achieving the wider goals of the larger project</td>
<td>X</td>
<td></td>
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<tr>
<td>Proficiency to handle confidential matters expeditiously</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Good time-keeping and punctuality</td>
<td>X</td>
<td></td>
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</tbody>
</table>

Date: December 2016