**RESPONSE TO SHORTLISTING CRITERIA**

**Communication (***Ability to communicate complex information with clarity to a range of diverse audiences, both orally and in writing***)**

I have about three years of teaching and research experience. In both roles, I have often received positive feedback from my line managers, supervisors, and research colleagues about how well I communicate across my ideas and information regarding my research. Students I teach in various class sessions on different modules, have also given me positive feedback in class polls and module surveys, with regards to how I communicate module content during the delivery sessions. Furthermore, I have successfully presented my research findings in conferences and workshops using communication aids like posters, presentations slides, and demonstrations. My written communication skill is evident in my publication in IEEE conference proceedings. For these reasons, I believe that I have an adequate level of communication skills required for this position.

**Knowledge and understanding of concepts, principles, techniques and industrial practices of software and mobile application development, including native mobile app development on various platforms, use of design patterns, and agile development techniques.**

My undergraduate and postgraduate academic background in Computer Science and Computing Solutions, have equipped me with an awareness, knowledge and understanding of concepts, principles, and design patterns such as: software development methodologies, Object Oriented programming concepts, UI design principles, Model-View-Controller (MVC) design pattern, and other frameworks. These are employed in simplifying application design; breaking down and organizing code into reusable core modules or functions; enhancing usability and user experience. My industrial experience within Hewlett-Packard as a Developer and at SES Building Repairs as a Web developer, provided me with opportunity to develop for both mobile and desktop platforms using a diverse range of applications, techniques and approaches, such as test-driven development approach and Agile methods, to ensure building, testing, deploying and maintaining suitable applications with minimal risks and adequate delivery times, to meet client requirements

**Knowledge Computer Science:Knowledge and understanding of current practices in the field of Computer Science**

My undergraduate and postgraduate academic background in Computer Science and Computing Solutions, have equipped me with an awareness, knowledge and understanding of concepts, principles, practices, frameworks technology and paradigms in the field of Computer science. My PhD experience has also provided me with exposure and knowledge of research in Computer Science, along with transferable skills. My industrial experience within Hewlett-Packard as a Developer, at SES Building Repairs as a Web developer, and working as a research developer in University-led collaboration HEIF and TSB projects with Industry Partners D2NA, provided me with opportunity to apply in business/organizational settings, knowledge and understanding of theoretical concepts and research methods within the field of Computer Science. It also provided me with opportunity to develop relevant practical skills in the areas of software development, databases, web and R&D, using a diverse range of applications, techniques, approaches and platforms.

**Extensive software and mobile app development experience on different platforms (Android, iOS and Windows), using modern development practices and preferably in the computing industry**

My industry experience spans development of software for use on both desktop and mobile platforms. During my time at Hewlett-Packard, I was part of a team of six that successfully designed, developed & maintained Milestone Tracking & Management SharePoint application for EMEA Sale Process and Decision Support (SPDS) team. My team was tasked with developing an application that would support the team both within office locations on desktops, as well as, on the move with their mobile devices (phones and tablets). Due to the fast-paced nature of the organisation, constant changing needs and requirements, with very tight deadlines and changing priorities to contend with, our team had to adopt an Agile approach to break the project down into prioritized list of short tasks and ensure delivery of a working model, with weekly incremental updates. At the end of each weekly cycle, the team met to review work done, check areas of improvement and ascertain next steps. This approach helped to us to focus and better understand clients' needs, and improve the quality of application delivered.

In contrast, my time at SES building repairs, had a different approach, that was very much akin to the Waterfall approach. The main project goals were defined at the very beginning, as well as the project requirements. The tasks were done created and assigned to very specific phases along the project timeline. Each task on completion, had to be signed off by my manager before I could proceed to the next task. This continued until the end of the project.

**Fluent ability in a variety of programming languages, such as Java, C++, C#, and Objective C, and in the use of modelling techniques such as UML**

I am fluent in C, C++, C#, SQL, Python, HTML, CSS, JavaScript and UML, having studied and taught both languages, as well as worked with both in Industry. I am fairly proficient in Java, since I don't often use it as much. Though I have got no experience in Objective C, I am quite confident, that I have the ability to quickly self-learn and master it, in line with the requirements of the role. This is achievable for me because I have a firm understanding of core programming foundations, concepts, ideas and principles such as loops, conditions, memory, variables, control of flow and structure of programs. This is mostly fundamental across most programming languages, with slight-to-medium syntactic variations in libraries and frameworks.

**Experience of providing pastoral and academic support to students**

Within my teaching role in Staffordshire University as a part-time Lecturer, responsibilities successfully carried out include: preparing, designing and delivering teaching/practical sessions to both regular students & work-based learning student groups; meeting with, and providing extra support to students in need of such; providing formative feedback and marking assessments; updating learning materials on the University’s VLE (Blackboard); supporting students' learning via email and Skype; organizing weekly progress meetings with students to check progress and provide guidance; signposting students to various University provisions as necessary; employing teaching methods that facilitate and encourage active engagement and participation of students, as well as employing the use of surveys and polls to obtain students' feedback on how best to improve their learning process.

**Experience of teaching Computer Science (***Experience of teaching Computer Science or a related area in an HE context)*

I have about three years’ experience teaching a variety of Computer Science modules in Staffordshire University, within the School of Computing and Digital Technologies. My academic and industrial background in the area of Computer science and related concepts provides me with the requisite subject area knowledge, while my knowledge gained from undertaking teacher training, equip me with the necessary skills for delivering teaching content and facilitating learning. The modules I have taught include the following:

==> Fundamentals of Computing & Mathematics

==> Professional and Academic Skills for Applied IT

==> Computer System Security

==> Professional Business Skills

==> Introduction to Security Technologies

==>Computer and Network Architecture

==> Operating Systems

**Research *(Experience of using initiative, creativity and judgement when undertaking research and scholarly activities in an area)***

Exposure and participation in a variety of funded research projects, as well as undertaking the PhD and Postgraduate Certificate in Research methods provided me with training and grounding in research methods, research approaches, techniques, understanding how to identify a problem area, how to investigate it using the right methodology, how to build background information or contextual information using the right sources of information, how to design research projects with sound ethical basis, and with emphasis on independent learning as a facilitator of research. Outcomes achieved or gained include: research skills; reflection; analysis; learning; problem Solving; communication through presentation and student-led seminars and discussion workshop; knowledge and application of knowledge in the following: conducting literature reviews, identifying and defining research questions and hypotheses, exploration of research methods and data collection techniques. Furthermore, the PhD project provided an opportunity to develop the ability to identify, evaluate and differentiate different research efforts in related areas of research, including multidisciplinary fields, in a scientific manner. This was also an opportunity to practice how to source out, research and evaluate relevant literary work, methodologies, and theoretical frameworks in line with identified aims and objectives, whilst considering ethical issues. It was also useful for providing me with the opportunity to take ownership of managing, prioritizing and developing my skills.

Engaging and participating in various funded research projects had a tremendous impact on the development and maturity of my research skills, introducing me into the world of collaborative and industrial research. The phases of the projects included: proposal phase, planning phase, literature review/feasibility research phase, proposal of high-level architecture design phase, report writing and presentation phases. Some of the output from these projects include: poster and abstract submissions to conferences, Literature review report, high-level design proposals and reports. At various stages of the research projects, I had to search and source out relevant articles, journals, books, and other research materials in order to review and understand the research area of the problem domain. During the literature review phases of the projects, I had to compare and critically evaluate all research materials, analyze data/information gathered from industry clients through surveys and focus groups, and subsequently, produce a comprehensive report of findings. This involved critically analyzing data and reflecting on the analysis in relation to the problem domain, understanding the information gathered, generating relevant hypothesis and problem statements, formulating action plans and adequate milestones/output, and communicating the results in both written (reports) and oral (presentations) formats. I utilized the research process in planning and carrying out research within these projects. This involved identifying the research problem; carrying out extensive literature review by searching for relevant literature. To maximize the success of literature search, careful planning was done. Decisions were made, for instance concerning the bibliographic databases to be used and the time period to search. Keywords to be used in searching were constructed carefully to save time, and looking through irrelevant material later. Searches were performed and the results were recorded. The output from the literature search included lists of references to articles, and other research literature relevant to the subject of interest for each project. Research literature related to the projects was critically evaluated in an objective manner; ethical considerations were assessed; pilot studies were conducted appropriately. All collected data were analyzed – these included measurable or qualitative data via surveys, and quantitative data via articles, journals, etc.; appropriate conclusions were formed based on critical evaluations and analyses. Searching and critical evaluation of research literature was done objectively in order to: provide up-to-date picture of the areas of interest and show the knowledge gaps; identify methods of investigation for further research; indicate possible contextual problems and solutions; reveal common findings and inconsistencies; increase understanding; identify good points, bad points, strengths, weaknesses, usefulness and limitations in each research project; identify unconsidered factors; and provide suggestions for further research. In addition, I documented and kept record of the process and findings, and followed the sequence of written research reports when writing my reports.

About My PhD

My PhD research is in the area of Collaborative software development in the Cloud. The emergence and adoption of paradigms such as Cloud Computing, Grids, Virtualization and Bio-inspired technologies has opened up opportunities and possibilities for more, and better sustainable collaboration in various disciplines. These disciplines include: Software development, collaborative learning, collaborative knowledge building and management, and other collaboration-dependent projects and endeavors, depending on one form of knowledge-producing artefacts or the other. However, adoption of these paradigms has also put organizations under pressure to discover new ways of effectively developing better software. They have introduced other factors which were hitherto, either non-existent or less-pronounced, but undermine collaboration within the lifecycle development process. Collaborative Software development lifecycle process in the Cloud, presents complexities and contexts, amidst other factors, that need to be considered during the process. These are sometimes underestimated, ignored, or sometimes, not given enough consideration and planning. This undermines the collaboration in the process, randomizes the process, and impacts the ability to facilitate a reproducible, sustainable, context-aware collaborative lifecycle development process in the Cloud. My research investigates this and makes proposals towards enhancing collaborative software development lifecycle process in the cloud.

**Key Achievements**

Successful execution of Key duties mentioned above, consistently delivering quality teaching services, participating in research and publications, as well as constantly improving own teaching methods and delivery

**Key Duties**

Preparing and delivering teaching lessons to students

Designing and coordinating tutorial/practical sessions.

Meeting with and providing extra support students

Providing formative feedback and marking assessments.

Designing learning materials for work-based learning

Updating learning materials on the University’s VLE (Blackboard).

Teaching and supporting students via Blackboard Collaborate, email and skype.

Marking student assessments and making them available to the award board

Invigilating tests and examinations sessions

Providing formative feedback and marking assessments.

Supervising and assessing student projects, one-to-one

Ensuring project proposals meet required award standard

Organizing weekly progress meetings with students to check progress and provide guidance.

**PgCHPE**

The Postgraduate Certificate in Higher and Professional Education (PgCHPE) course is aimed at those who are new to teaching in higher and professional education and those with experience who would like to reflect on and enhance their practice. The aim is to enhance student learning by reflecting on the needs of individual learners, and the range of strategies I might use to meet those needs. The PgCHPE programme is wholly aligned to the UK Professional Standards Framework (UK PSF)

**PgCRM**

A course geared towards equipping me with an understanding of research methods and approach required to carry out effective research

**My Preference**

I am keen to develop my academic career further in both research and teaching roles, and so, I am open to any activities that aligns with these. I would also be interested in getting involved in any e-learning and work-based learning initiatives

**The ability to contribute professionally in internal and external meetings, acting as a representative of the University and a champion of the subject specialism\***

My ability to professionally and effectively contribute in internal and external meetings, as a University representative and a subject specialist is underscored by the following experiences below.

During my study on the MSc programme, I was a student representative. I endeavored to gather views from peers on the award regarding various aspects of the award that impacts all, and present these during at meetings with administrative members of staff. The overall aim of this was to ensure that students' voices were heard and taken into cognizance towards improving the learning experience for current, as well as, for future students on the award.

Within my role as a part-time lecturer within the university, I regularly attended and participated in the annual School of Computing Development Day, where general talks, discussions and breakout sessions are held about departmental plans and strategies with regards to improving student learning experience, and effectively aligning departmental and staff activities/development with the University's vision.

Within my role as a research student, I participated in conferences and seminars, as well as research group meetings where the focus is usually subject-specific. In such circles, I have actively participated in presentations, discussions, and talks, whilst maintaining professional conduct.

**Educated to Doctoral or professional equivalent level in a relevant subject area\***

I have a Bachelor’s degree in Computer Science, and Master’s degree in Computing Solutions for Business. I am currently en-route to completing my PhD degree in Computer Science. With these, I believe I have the professional requirements relevant to this role

**specialist knowledge in CS:Possess sufficient breadth and/or depth of specialist knowledge to work within established research programmes and write authoritatively in the area of Computer Science.**

My academic background in Computer Science (Undergraduate, Masters and PhD), as well as my engagement in research, evidenced by my publications as shown below, all serve as evidence that I possess sufficient breadth and depth of specialist knowledge. My work experience spanning various areas within the field of Computer science is a clear indication of application of these knowledge. My current teaching role is another indicator showing that not only do I possess this knowledge, but I am also capable of transferring this knowledge to students, and motivating them to develop and excel in this field. Furthermore, I have plans to

submit more publications that I am currently working on at this time. These are aimed at

disseminating findings from research conducted within my PhD

**Previous experience of teaching in HE and developing specialist teaching materials, with membership of the HE Academy or other equivalent teaching qualification\***

I have almost three years’ experience teaching a variety of Computer Science modules in Staffordshire University, within the School of Computing and Digital Technologies. My academic and industrial background in the area of Computer science and related concepts provides me with the requisite specialist knowledge, while my knowledge gained from undertaking teacher training, equips me with the necessary skills for delivering teaching content and facilitating learning. The modules I have taught include the following:

- Fundamentals of Computing & Mathematics

- Professional and Academic Skills for Applied IT

- Computer System Security

- Professional Business Skills

- Introduction to Security Technologies

- Computer and Network Architecture

- Operating Systems

In my teaching role in Staffordshire University, I have consistently delivered quality teaching/tutoring services, participating in research and publications, as well as, constantly improving own teaching methods and delivery through reflection on practice and attendance of development programmes such as the TeachWell training and the PgCHPE course. Also, I successfully executed the following assigned key duties mentioned below.

- Preparing and delivering teaching lessons to students

- Designing and coordinating tutorial/practical sessions

- Meeting with and providing extra support to students

- Providing formative feedback and marking assessments.

- Designing learning materials for work-based learning students

- Updating learning materials on the University’s VLE (Blackboard).

- Teaching and supporting students via email and Skype.

- Marking student assessments and making them available to the award board

- Invigilating tests and examinations sessions

**An effective team player who is self-motivated and with good organizational skills and able to work on own initiative\***

During my role within Hewlett-Packard, I have worked in teams as large as twenty and others as small as four. Within my role as a part-time research developer on a couple of funded collaborative projects between Staffordshire University and Industry partners, D2NA Associates (HEIF projects & TSB bids), I have had to work within teams with a diverse range of people with a remix of skills and cultures. I have always worked well with other team members and enjoyed a good rapport with them, both at work and socially. I work closely with other team members to ensure that tasks, presentations, demonstrations, meetings and seminars are organized and executed effectively, and that reports are distributed on time and that everything runs smoothly. I sometimes volunteer to assist others in the team when there are deadlines to be met, and ensure that I keep others informed of issues that may be relevant to them.

Within my PhD study, as well as my previous job roles, sometimes my supervisor or line manager may be required to be away from the office several times a week. In such situations, I frequently work independently and use my initiative to handle situations in their absence. Examples of things I have initiated in the past include: choosing an as aspect of my research to develop and submit to a reputable conference (within Staffordshire University); developing a new way to automate workflows for populating SharePoint lists in order to improve performance for client teams using the application (within Hewlett-Packard), which resulted in less escalation requests and less need for manual approval. This made it possible for my line manager to approve workflows from outside the office.