**School of Computer Science & Informatics, Cardiff University**

**Postgraduate Placement SFIA Mapping Form (CMT305)**

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| **Name of student:** | Yan Tung Lam |
| **Employer:** | IDBS |
| **Name of work-based supervisor:** | Kemal Yilmaz |
| **Date:** |  |
| **Mid way or end of placement:** | Mid-way |
| **Student version or Employer version:** | Student |

*The student version of this form should be filled in by the student; the employer version should be filled in by the work-based supervisor. The student and work-based supervisor are encouraged to discuss and coordinate when filling in their respective forms. Such discussion will normally result in significant similarities between the student version and the employer version of this form, except when there were irreconcilable differences of opinion.*

**Core Competencies**

Complete the matrix below by indicating (using the guidance below) which of the Core Competency skills the student has *knowledge of*, has *experience in*, or is *competent in* at the current stage of the placement. The student will be asked to provide evidence of this in the draft and final reflective report. A postgraduate placement student is expected to have at least *experience in* at least five of the Core Competencies and at least *knowledge of* the other Core Competencies by the end of the placement.

**Knowledge of** – understands what it is but has little or no experience of applying this knowledge.

**Experience in** – has a little experience and has can evidence at least one example.

**Competent in** – has significant experience in and can evidence several examples.

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| **Core Competency** | **Level 4 Description** | **Knowledge of / Experience in / Competent in** |
| Use of tools standards, methods, applications | Selects appropriately from, and assesses the impact of change to applicable standards, methods, tools, applications and processes relevant to own specialism. |  |
| Communication Skills | Communicates fluently, orally and in writing, and can present complex information to both technical and non-technical audiences when engaging with colleagues, users/ customers, suppliers and partners. |  |
| Security Privacy & Ethics | Fully understands the importance and application to own work and the operation of the organisation. Engages or works with specialists as necessary. |  |
| Time Management Skills & Approach to Work | Demonstrates an awareness of risk and takes an analytical approach to work. Maximises the capabilities of applications for their role and evaluates and supports the use of new technologies and digital tools. Contributes specialist expertise to requirements definition in support of proposals. Shares knowledge and experience in own specialism to help others. |  |
| Knowledge | Has a thorough understanding of recognised generic industry bodies of knowledge and specialist bodies of knowledge as necessary. Has gained a thorough knowledge of the domain of the organisation. Is able to apply the knowledge effectively in unfamiliar situations and actively maintains own knowledge and shares with others. Rapidly absorbs and critically assesses new information and applies it effectively. |  |
| Learning & Professional Development | Maintains an awareness of developing practices and their application and takes responsibility for driving own development. Takes the initiative in identifying and negotiating their own and supporting team members’ appropriate development opportunities. Contributes to the development of others. |  |
| Autonomy | Works under general direction within a clear framework of accountability. Exercises substantial personal responsibility and autonomy. Uses substantial discretion in identifying and responding to complex issues and assignments as they relate to the deliverable/scope of work. Escalates when issues fall outside their framework of accountability. Plans, schedules and monitors work to meet given objectives and processes to time and quality targets. |  |
| Influence | Influences customers, suppliers and partners at account level. Makes decisions which influence the success of projects and team objectives. May have some responsibility for the work of others and for the allocation of resources. Engages with and contributes to the work of cross-functional teams to ensure that customers and user needs are being met throughout the deliverable/scope of work. Facilitates collaboration between stakeholders who share common objectives. Participates in external activities related to own specialism. |  |
| Complexity | Work includes a broad range of complex technical or professional activities, in a variety of contexts. Investigates, defines and resolves complex issues. Applies, facilitates and develops creative thinking concepts or finds innovative ways to approach a deliverable. |  |

**SFIA Professional Skills**

Highlight the criteria that the student has demonstrated to satisfy at the current stage of the placement. A postgraduate student is expected to reach at least level 4 for at least one SFIA Professional Skill by the end of the placement.

**Programming/software development PROG** – Developing software components to deliver value to stakeholders.

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| **Level 2** | **Level 3** | **Level 4** | **Level 5** |
| Designs, codes, verifies, tests, documents, amends and refactors simple programs/scripts. Applies agreed standards and tools to achieve a well-engineered result. Reviews own work. | Designs, codes, verifies, tests, documents, amends and refactors moderately complex programs/scripts. Applies agreed standards and tools to achieve a well-engineered result. Monitors and reports on progress. Identifies issues related to software development activities. Proposes practical solutions to resolve issues.Collaborates in reviews of work with others as appropriate. | Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services. Contributes to the selection of the software development methods, tools and techniques.Applies agreed standards and tools to achieve well-engineered outcomes. Participates in reviews of own work and leads reviews of colleagues' work. | Takes technical responsibility across all stages and iterations of software development. Plans and drives software construction activities. Adopts and adapts appropriate software development methods, tools and techniques. Measures and monitors applications of project/team standards for software construction, including software security. Contributes to the development of organisational policies, standards, and guidelines for software development. |

**Testing TEST** – Investigating products, systems and services to assess behaviour and whether this meets specified or unspecified requirements and characteristics.

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| **Level 2** | **Level 3** | **Level 4** | **Level 5** |
| Designs test cases, creates test scripts and test data, and automates repeatable tasks working to the requirements or specifications provided.Defines test conditions for given requirements. Executes and records manual and automated testing in accordance with test plans.Analyses and reports on test activities, results, issues and risks. | Designs test cases and test scripts under own direction, mapping back to pre-determined criteria, recording and reporting test outcomes. Participates in requirement, design and specification reviews, and uses this information to design test plans and test conditions. Applies agreed standards to specify and perform manual and automated testing. Automates testing tasks and builds test coverage through existing or new infrastructure. Analyses and reports on test activities, results, issues and risks. | Selects appropriate testing approach, including manual and automated testing.Develops and executes test plans and test cases. Implements scalable and reliable automated tests and frameworks. Collaborates across parties involved in product, systems or service design and development to enable comprehensive test coverage. Identifies improvements in requirements, design or specification processes to increase the effectiveness and efficiency of testing.Analyses and reports on test activities, results, issues and risks, including the work of others. | Plans and drives testing activities across all stages and iterations of product, systems and service development. Provides authoritative advice and guidance on any aspect of test planning and execution. Adopts and adapts appropriate testing methods, automated tools and techniques to solve problems in tools and testing approaches. Measures and monitors applications of standards for testing. Assesses risks and takes preventative action.Identifies improvements and contributes to the development of organisational policies, standards, and guidelines for testing. |