JOB PROFILE

Profile	Software Developer
MITA Career Level *Based on SFIA v6 Responsibility Levels*	3

SUMMARY STATEMENT

Builds/codes ICT solutions and specifies ICT products according to customer needs.

MISSION

Ensures building and implementing of ICT applications. Contributes to planning, low level design. Compiles diagnostic programs and designs and writes code for operating systems and software to ensure optimum efficiency and functionality.

DELIVERABLES

Accountable	• Software component • Hardware component
Responsible	• Solution documentation
Contributor	• Software design description • Test procedure • Solution in operation

MAIN TASKS

- Develop component.
- Test component.
- Shape documentation.
- Gather requirements.
- Provide component support beyond the first level.
- Other duties as assigned.

ESSENTIAL BASIC ATTRIBUTES *Based on SFIA v6 according to Responsibility Levels (Appendix I)*

Autonomy	Works under general direction. Uses discretion in identifying and resolving complex problems and assignments. Usually receives specific instructions and has work reviewed at frequent milestones. Determines when issues should be escalated to a higher level.
Influence	Interacts with and influences colleagues. Has working level contact with customers, suppliers and partners. May supervise others or make decisions which impact the work assigned to individuals or phases of projects.
Complexity	Performs a range of work, sometimes complex and non routine, in a variety of environments. Applies methodical approach to issue definition and resolution.

Business Skills	Demonstrates an analytical and systematic approach to issue resolution. Takes the initiative in identifying and negotiating appropriate personal development opportunities. Demonstrates effective communication skills. Contributes fully to the work of teams. Plans, schedules and monitors own work (and that of others where applicable) competently within limited deadlines and according to relevant legislation, standards and procedures. Appreciates the wider business context, and how own role relates to other roles and to the business of the employer or client.

ESSENTIAL PROFESSIONAL ATTRIBUTES *Based on SFIA v6 (Appendix I)*

Code	Description	SFIA Level
BUAN	Business Analysis	3
REQM	Requirements definition and management	3
BSMO	Business modelling	3
DESN	Systems design	3
DBSD	Database design	3
PROG	Programming/software development	3
TEST	Testing	3
PORT	Porting/Software configuration	3
CHMG	Change management	3
ASUP	Application support	3
DTAN	Data analysis	3
INCA	Information content authoring	3
USEV	User experience evaluation	3
HSIN	Systems installation/decommissioning	3
CFMG	Configuration management	3
USUP	Service desk and incident management	3

ESSENTIAL SOFT SKILLS *Based on ESCO database (Appendix II)*

Social Skills – Working with others and as a team
Attitudes and Values
Thinking – Creative and Analytical
Communication – Verbal and non-Verbal

CERTIFICATION

Name	Relevant Professional Certification
Mandatory	No

ELIGIBILITY CRITERIA

Successful completion of probation.

REPORTING LINE

Reports to	Head of Department or delegate
Interacts with	Peers
Supervises	N/A

WORKING CONDITIONS

Normal hours with the possibility to provide support in crisis situations after office hours or on weekends. Abnormal support may be required on roster basis.

APPENDIX I - SFIA SKILLS DEFINITION

BUAN Business Analysis: Level 3 Investigates operational needs and problems, and opportunities, contributing to the recommendation of improvements in automated and non-automated components of new or changed processes and organisation. Assists in defining acceptance tests for these recommendations.

REQM Requirements Definition and Management: Level 3 Defines scope and business priorities for small-scale changes and may assist in larger scale scoping exercises. Elicits and discovers requirements from operational management and other stakeholders. Selects appropriate techniques for the elicitation of detailed requirements taking into account the nature of the required changes, established practice and the characteristics and culture of those providing the requirements. Specifies and documents business requirements as directed, ensuring traceability back to source. Analyses them for adherence to business objectives and for consistency, challenging positively as appropriate. Works with stakeholders to prioritise requirements.

BSMO Business Modelling: Level 3 Conversant with techniques covering full range of modelling situations. Models current and desired scenarios as directed. Selects appropriate modelling techniques for meeting assigned objectives. Gains agreement from subject matter experts to models produced. Reviews resulting models with stakeholders and gains resolution to resultant issues.

DESN Systems Design: Level 3 Specifies user/system interfaces, and translates logical designs into physical designs taking account of target environment, performance requirements and existing systems. Produces detailed designs and documents all work using required standards, methods and tools, including prototyping tools where appropriate.

DBSD Database Design: Level 3 Develops specialist knowledge of database concepts, object and data modelling techniques and design principles. Translates object and data models into appropriate database schemas within design constraints. Interprets installation standards to meet project needs and produces database components as required. Evaluates potential solutions, demonstrating, installing and commissioning selected products.

PROG Programming/software development: Level 3 Designs, codes, tests, corrects, and documents moderately complex programs and scripts from agreed specifications and subsequent iterations, using agreed standards and tools. Collaborates in reviews ofspecifications, with others as appropriate.

TEST Testing: Level 3 Reviews requirements and specifications, and defines test conditions. Designs test cases and test scripts under own direction, mapping back to pre-determined criteria, recording and reporting outcomes. Analyses and reports test activities and results. Identifies and reports issues and risks associated with own work.

PORT Porting / Software Configuration: Level 3 Assists in the configuration of software and equipment and the systems testing of platform-specific versions of one or more software products. Documents faults, implements resolutions and retests to agreed standards.

CHMG Change Management: Level 3 Develops, documents and implements changes based on requests for change. Applies change control procedures.

ASUP Application Support: Level 3 Identifies and resolves issues with applications, following agreed procedures. Uses application management software and tools to collect agreed performance statistics. Carries out agreed applications maintenance tasks.

DTAN Data Analysis: Level 3 Applies data analysis, data modelling, and quality assurance techniques, based upon a detailed understanding of business processes, to establish, modify or maintain data structures and associated components (entity descriptions, relationship descriptions, attribute definitions). Advises database designers and other application development team members on the details of data structures and associated components.

INCA Information Content Authoring: Level 3 Liaises with clients/users to clarify details of requirements. Designs, creates and tests moderately complex subject matter, using easily understood language. Designs content for search engine optimisation, making informed decisions about the best way to present information to users. Ensures that content is accurate, relevant and current and takes into account user needs.

USEV User Experience Evaluation: Level 3 Evaluate prototypes to obtain user feedback on requirements of developing systems. Tests the usability of component systems, and alternative designs, administering formative and summative usability tests, logging and analysing data. Check systems for adherence to applicable human science knowledge, style guides, guidelines, standards and legislation. Evaluates the usability of existing or competitor systems to provide benchmark values and as input to design.

HSIN Systems Installation / Decommissioning: Level 3 Installs or removes hardware and/or software, using supplied installation instructions and tools including, where appropriate, handover to the client. Conducts tests, corrects malfunctions, and documents results in accordance with agreed procedures. Reports details of all hardware/software items that have been installed and removed so that configuration management records can be updated. Provides assistance to users in a professional manner following agreed procedures for further help or escalation. Reviews change requests. Maintains accurate records of user requests, contact details and outcomes. Contributes to the development of installation procedures and standards.

CFMG Configuration Management: Level 3 Applies tools, techniques and processes to track, log and correct information related to CIs, ensuring protection of assets and components from unauthorised change, diversion and inappropriate use.

USUP Service Desk and Incident: Level 3 Following agreed procedures, identifies, registers and categorises incidents. Gathers information to enable incident resolution and promptly allocates incidents as appropriate. Maintains records and advises relevant persons of actions taken.

APPENDIX II - ESCO DATABASE

Social Skills

Working with Others - work as part of a team

- Accept constructive criticism
- Collaborate on tasks
- Foster social networks
- Give constructive criticism
- Share information
- Share opinions
- Share resources

Attitudes and Values at Work

Attitudes

- Demonstrated commitment – attend to detail, attend to quality, be curious, make an effort, meet commitments, persist, show enthusiasm, work efficiently, work independently
- Handles challenges – adapts to changes, build on experience, cope with pressure, deal with uncertainty, learn from mistakes, manage frustration

Values

- Follow ethical work practice – identify environmental impact, identify ethical issues, identify social impact, make ethical choices, reflect on own work practices
- Show respect – demonstrate tolerance, show consideration, show good manners, treat people fairly, work with different viewpoints

Thinking

Creative and Entrepreneurship

- Generate new ideas – anticipate needs, experiment, recognise opportunity, show originality, visualise completed work
- Turn new ideas into action – adapt implementation strategy, create implementation strategy, produce original work

Critical thinking

- Examine evidence – check facts, consider alternative views, consider impact of judgement, critique reasoning, notice bias
- Explore issues – ask key questions, draw conclusions, explain reasoning, identify live topics, identify patterns, make judgements, question assumptions, recognise connections

Learning

- Manage learning process – monitor learning process, plan learning, use different learning strategies
- Manage the learning self – prioritise learning tasks, reflect on learning process

Planning own work

- Follow plan – monitor progress
- Manage time – work out time line
- Sets target – identify tasks

Problem Solving

- Analyse the problem – examine causes of problem, explore context of problem, identify stakeholders involved
- Plan for action – devise strategy, prioritise actions, set goals
- Take action to solve the problem – coordinate actions, evaluate success, implement strategy, multi task, troubleshoot

Communication
Non-verbal communication ○ Respond to cultural differences ○ Understands non-verbal cues – read different types of eye contact, read different types of touch, read facial expressions, understand gestures, understand postures, understand uses of personal space ○ Use non-verbal cues – make appropriate use of eye contact, make appropriate use of personal space, make appropriate use of touch, use appropriate facial expressions, use appropriate gestures, use appropriate postures Verbal communication ○ Spoken interaction – debating techniques, interrogating, negotiating, persuading ○ Spoken production – presentation techniques