

Job Advert for Software Engineer

The Job Position

Position Number	CC0006
Job Title	Software Engineer
Position	Software Engineer
Job Level	Senior
Department	Consultation Centre
Physical Location (Company)	Software Factory in Centurion Office
Work Location	<ul style="list-style-type: none"> • Software Factory based in Centurion • Offsite at Client Sites most of the time. • Travelling in SA and abroad for long term and short-term projects from time to time – passport a prerequisite
Date of Appointment	On Request
Type of Appointment	Permanent / Sub-Contractors Project (typical 2-5 years)
Purpose of the Job	To systematically engineer and establish a sound and permissible application architecture for the business. The Software Engineer fulfils the role of an Application Architect.
Job Functions	<p><u>Main Task:</u> To co-operate closely with the Business Engineer to ensure that:</p> <ul style="list-style-type: none"> • The requirements are translated into an application architecture that correctly reflects business requirements; • The approach is practical and executable within the business and application parameters; • The desired architectural features are not compromised for short sighted short-term benefits only. <p><u>Other high-level tasks:</u></p> <ul style="list-style-type: none"> • Ensures optimization of the overall application and technology design. • Assists in the scoping of a project and its context. • Gives input to the project plan on deliverables, timeframes and cost. • Assist with the integration between systems and recommends interfaces. • Understand the business architecture, and fully model and specify systems at the applications architecture level. • To establish the Operating Environment, i.t.o. physical infrastructure and application architecture • To provide support for the Business Engineer and Process Custodian • To stay abreast of technology developments



Competencies	<ul style="list-style-type: none"> • Leadership • Planning & Organizing / Quality Orientated • Technical Skill & Competence • Cross-Functional Awareness • Problem Solving & Analysis • Oral Communication • Commercial Awareness • Customer Service Orientated
References	References from the last 3 projects are compulsory and will be verified
Education	<ul style="list-style-type: none"> • BSc Degree (IT Related) • Qualified Applications Architect
Enquiries & Application	<p>Submit written job applications:</p> <ul style="list-style-type: none"> • Together with resumes • Together with previous employer references • Indicating when available for interviews – should it be required.
Email Address	jobs@systemmethodologies.co.za
Applications: Closing Date	Perpetual
Date Published	X
Experience	<ul style="list-style-type: none"> • Application and Platform Architecture skills • Application Engineering • The integration of different application and platform bases into a coherent architecture. • The compromises that pre-developed building blocks enforce on a pure architecture and how to accommodate these compromises without obscuring the architecture platform. • How to protect a current investment, which could even initially architecturally engineered platform. • Must have experienced the issues involved with migration of applications. • Deployment of platforms and applications. • Must remain abreast of all platform and application technologies and changes within the different industries. • Package Evaluation experience is essential • Project Management • Organisational behavior consulting • Change Management • Must have practical experience of architecture in terms of understanding the effort • Required to effect change in an organisation through projects. This issue revolves around identification of sub-projects, initiating sub-projects, scoping and controlling the scope of sub-projects as well as ensuring architectural context and relevance thereof, at all three architectural levels. • Must co-ordinate and ensures alliance between the three architectural levels. • An estimated 5 Years job related work experience • Large Complex Project Exposure • Exposure in working in large Enterprise Organisations



General	<ul style="list-style-type: none"> • Infomet Methodology – Training will be provided • Must be able to work long hours under a tremendous amount of pressure.
More Information	Refer to the detailed adverts at www.infomet.com/pages/main/contact_us.html

The Job Responsibilities

Industry Experience (one or more areas)	Financial Services and/or Banking, Investments, Insurance, etc. Retail Sector – Supply Chain Management, Logistics, Warehousing, Distribution, Retail, Procurement, Cost Modeling, Financial Modeling, etc. Manufacturing
Knowledge and Skills	<ul style="list-style-type: none"> • Full understanding of the Infomet Methodology • Good understanding of the operating environment constituents • Good understanding of the current technologies and future trends • Previous experience as a Technical and Applications Specialist • Communication skills to co-ordinate three architectural levels in senior management sessions. The corporate strategic sessions require excellent facilitation skills. • Modeling and specifying all of the dimensions of a system up to the full logical level as well as physical level. • Architectural Integration • Joint Application Development (JAD) • Presentation and Negotiation Skills • Application and Technical Analysis Skills • Training Capability • Conceptualization of platform and application architectures • Sound understanding of SDLC and PLC • Demonstrable Experience & Skills in Modeling and Advanced Documentation • Logical negotiation and contextualization capabilities • Must have the capability to negotiate and plan for extended periods of time and to produce solutions on an esoteric as well as conceptual level. • Platform and Application Installations • Integration Skills of applications and platforms • Measurement skills i.t.o. the efficiency and effectiveness of applications and platforms • An aptitude for applications and technology • Skills that will enable one to anticipate shifts and trends in platforms, solution provision and approaches around technology. • Interpretation of the effect of applications and platforms on business processes and vice versa.



Development Methodology Knowledge and Experience

Methodology:

- Specification development
- Application Features
- Modelling (DSL, UML or Infomet)
 - Data Modelling
 - Function Modelling
 - Process Modelling
 - Object Modelling
 - State Transition Diagram
 - Pseudo Code
 - Program Structures
- Coding
 - Standards
 - Coding
 - Programs
 - Source Control
 - 3 Years - Component writing
 - Interfaces
 - API Libraries
- Data Base Programming
 - RDBMS
 - MS SQL Server experience
 - Oracle PL/SQL Development
- Experience using BI Tools
- Test Case Preparation and Participation
- Documentation
 - Templates
 - Standards

Development Project Knowledge and Experience

Project Life Cycle Knowledge & Tools:

- Phases and Stages
- Application Segmentation
- Development Schedule
- Development Estimation
- Development Project Plan
- Knowledge of Development Life Cycle
- Work Breakdown Structure (WBS)
- Time Recording
- Version Control
- Source Code Management
- Debug Tools
- Profiling Tools
- Testing & Tools

Team Functioning:

- Documenting Skills
- Team interaction
- Commitment
- Participation
- Dedication, etc.
- 2 Years - Implementation of Object Oriented SDLC



Advanced Development Technologies and Experience

Front End Development

- Program Structure
 - Logical level
 - Class
 - Modules
- Program Language Features
 - Methods
 - Properties
 - Inheritance
 - Pseudo Code
 - Interfaces

WEB Development

- HTML5, CSS3 & Java Script (Libraries)
 - Bootstrap
 - Angular
 - UIKit
 - DevExpress for ASP
- XML
- Frames
- Java SP
- Active X
- AJAX
- Responsive or Dynamic

Data Base Programming

- Data Definition (DDL)
- Data Manipulation (DML)
- DB MS Types
 - Relational
 - Multi-Dimensional
 - Cube
 - Rollup
 - Memory Resident
- Coding
 - Standards
 - Pseudo Code
 - Transactioning
 - Short
 - Long
 - Exception Handling
 - Optimization

Multi-Tier: (Advanced Programming Skills)

- Tiering & Layering
- Persistence
- Application Services
- Threading & Multiprocessing
- Services & Connections
- Scalability
- Fail over Safety

