

**Position Description**  
**IS SYSTEMS DEVELOPMENT SERVICES SENIOR**  
**December 2012**

**#14. POSITION SUMMARY**

Under the general supervision of the Small Agency Systems Section Chief in the Division of Enterprise Technology (DET), this position performs as a senior systems analyst/programmer, responsible for full lifecycle development services and ongoing application support for participating small agencies. Applications for these agencies may have statewide impact, cross organizational boundaries (both within and external to State Government), and involve multi-platform environments and tools. Specific examples include licensing and regulatory systems within the Department of Safety and Professional Services (DSPS), among others.

Position duties include analyzing, designing, planning, and building state of the art .NET applications, providing support for these applications, tracking emerging technologies, researching new products, and assisting with proactive planning for future internal and enterprise-wide applications and systems. Depending on assignments, the position may also perform project management functions and project leadership.

The position requires advanced working knowledge of web development methodologies, programming languages/environments (primarily .NET), operating systems, relational database concepts, and general information technology methods. For applications and systems developed by this position, responsibilities include the research, standardization, deployment, administration, and support of all relative tools associated with that particular application, customer or client. Within a team development environment, the incumbent is also responsible for providing consulting and support to peers in his/her areas of expertise, as well as for the transition of accumulated support knowledge to backups and other support personnel.

## **#15. GOALS and WORKER ACTIVITIES**

### **Time % Goals and Worker Activities**

- 35%**
- A. Perform system analysis activities for applications developed and supported by the Section.**
- A1. Perform systems analysis for new applications and proposed changes, revisions, and problem areas associated with applications supported by the Section. This includes conferring with users to identify project scope, requirements definition and appropriateness of subsequent project.
  - A2. Prepare detailed design specifications for new applications and new system functions in accordance with departmental and user guidelines.
  - A3. Perform detailed system design specification reviews to assure the integrity and accuracy of the specifications, and contribute to management and technical understanding of the specifications.
  - A4. Develop test standards for verifying program completeness and accuracy as it is compared to the overall project objectives.
  - A5. Develop time estimates to accomplish project tasks.
  - A6. Attend user meetings and prepare reports or minutes of decisions or agreements made at such meetings, providing regular feedback to management.
  - A7. Provide for user documentation, which may include user training in the overall operation of the system.
- 35%**
- B. Perform complex programming/development tasks in support of applications developed and supported by the Section.**
- B1. Perform computer programming for new applications and new system functions in accordance with design specifications and departmental and user guidelines.
  - B2. Investigate any problems that may occur in the development and installation of application programs
  - B3. Conduct systems testing with other analyst/programmers to assure that computer programs and procedures are in compliance with program specifications.
  - B4. Develop adequate systems and programming documentation to meet DET standards. This includes system flow charts, program specifications, data base field definitions and overall hardware and software requirements.
  - B5. Use standard section tools to manage source and executable code, including codes builds, progression through environments, and successful implementation of the production deliverable.

20%

**C. Assist with consulting and technical support activities for applications supported by the Section.**

- C1. Provide systems analyst/programmer support in evaluating proposed changes, revisions, and problem areas within applications, and provide systems maintenance services when operational failures occur.
- C2. Propose software and/or hardware solutions to implement proposed application right-sizing or migration to new technology.
- C3. Provide backup to peers involved in development, modification, and operation of systems utilizing a wide variety of software and hardware.
- C4. Advise and consult with DOA users and users from other State Agencies concerning proposed application modifications or problems with current processing and/or reporting.
- C5. Revise computer program or procedure documentation to satisfy technical requirements and to meet the DET system documentation standards.
- C6. Satisfy ad-hoc reporting requests from staff and user agencies.

5%

**D. Perform administrative and miscellaneous tasks related to the on-going mission of the section, bureau and division.**

- D1. Satisfy all required time reporting and project reporting requirements.
- D2. Interact with other DET staff and clients in a professional manner to maintain a positive working environment.
- D3. Conduct evaluations of hardware and software for possible purchase and use within the Division.
- D4. Demonstrate familiarity with Personal Computer hardware and related software, and share this knowledge and skill with peers and customers.
- D5. Perform all duties assigned, either by the Unit supervisor or by his/her delegate, in a timely and professional manner.
- D6. Support the Department's Affirmative Action, Diversity, and Safety Policies.

5%

**E. Participate in employee development programs and activities.**

- E1. Review new developments in information systems through ongoing review of trade, technical and vendor publications.
- E2. Attend training sessions and vendor demonstrations concerning hardware, software and techniques with possible applications for use within the Division.
- E3. Actively plan for and pursue personal training appropriate for career development and personal growth.

## **Knowledge and Skills**

### **General**

- Experience in analyzing enterprise business and technology issues in a large corporation or government organization.
- Ability to interact with peers and business customers both internal and external to the agency
- Strong analysis skills grounded in technology and business planning and management.
- Effective use of consensus building to reach decisions.
- Solid understanding of good programming and design practices
- Ability to adhere to policies, procedures, and standards in system design and specification, program development, documentation, planning and status reporting
- Strong analytical skills and passion for solving challenging problems.
- Strong debugging and troubleshooting skills
- Ability to work effectively as part of a collaborative team effort
- Ability to learn quickly; synthesize complex information; identify key points and communicate results accurately and effectively.
- Resourceful in identifying/obtaining information sources needed to perform effectively.
- Ability to work independently and exercise appropriate discretion with a minimum of supervision and produce effective, acceptable results within short time frames.
- Strong oral and written communication skills including the ability to communicate business and technical concepts and information effectively to a wide range of audiences including the public.
- Proven ability to communicate complex concepts orally; ability to prepare written reports that are clear, concise and meaningful.
- Strong inter-personal skills including the ability to work independently with business and IS managers and staff in federal, state and local agencies, and with division and department managers or staff.

### **Technological / Specific**

- Experience in the Software Development Life Cycle and general development methodologies
- Experience in using Source Code Versioning tool like SourceSafe or Subversion or TFS
- Knowledge and use of Test Driven Development (TDD) and continuous integration
- Knowledge and use of Object Oriented Design and Analysis
- Experience in Object Oriented Programming
- Experience using .Net 3.5 or 4.0 Framework
- Experience in programming in ASP.NET
- Knowledge and use of ASP.Net MVC
- Experience in programming in C# or VB.NET
- Experience using Visual Studio 2010 or 2008
- Knowledge and use of Entity Framework
- Knowledge and use of Software Design Patterns
- Knowledge and use of Microsoft Enterprise Library
- Knowledge and use of Relational database design and development concepts
- Experience in Database Modeling and Query Optimization (intermediate)
- Experience in using Oracle 10g or 11g Database
- Experience in using Oracle PL/SQL
- Experience in using SQL Server database
- Experience in using SQL Server Reporting Services (SSRS)
- Experience in using Stored procedures, Triggers
- Knowledge and use of XML, XSLT
- Experience in using HTML, CSS, JavaScript
- Ability to partition and debug an n-tiered process, including isolating all levels and tracing data-flow through from end-to-end (advanced)

- Knowledge in implementation of database and application level security