

DUTY STATEMENT

CTC-HR 101 (REV 12/2021)

		RPA #	EFFECTIVE DATE: Click or tap here to enter text.
EMPLOYEE'S NAME Click or tap here to enter text.		POSITION NUMBER (Agency - Unit - Class - Serial) 192-406-1415-003	
DIVISION/UNIT Division of Technology and Innovation / Systems Architecture		CLASS TITLE/WORKING TITLE Information Technology Specialist III - AI Systems Architect	

You are a valued member of the Commission on Teacher Credentialing (Commission). You are expected to work cooperatively with all employees, our customers, and members of the public to enable the Commission to provide the highest level of service possible. Your creativity and ingenuity are encouraged. Your commitment to treat others fairly, honestly, respectfully, and professionally is critical to the success of the CTC's Mission.

BRIEFLY (1-3 sentences) DESCRIBE THE POSITION'S PRIMARY ROLE AND PURPOSE. PLEASE INCLUDE THE POSITION'S REPORTING RELATIONSHIP AND LEVEL OF INDEPENDENCE.

Under the general direction of the Chief Information Officer (CIO), the incumbent functions as a lead and/or works independently as a high-level technical specialist on complex, business-critical systems and AI-enabled solutions. Designs, evaluates, and implements enterprise AI systems, automation tools, and machine-learning components integrated within the Commission's technology ecosystem. Communicates complex AI and technical concepts to technical staff and management verbally and in writing. This position works independently and as a technical specialist on AI architecture initiatives while collaborating closely with and taking architectural guidance from the current Systems Architect to ensure unified enterprise design and alignment across all major systems. Duties fall within Software Engineering and System Engineering domains.

Percentage of time performing duties	Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first.
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35%

ESSENTIAL FUNCTIONS

Systems & AI Architecture

- Research, analyze, design, document, and implement artificial intelligence (AI) system architectures, machine-learning pipelines, model operations (MLOps), and intelligent automation components.
- Evaluate emerging AI and enterprise technologies; recommend solutions to the CIO, software development manager, in coordination with the existing Systems Architect to ensure consistency, alignment, and adherence to established architectural standards.
- Maintain understanding of all enterprise systems to support optimal AI integration and modernization efforts.
- Recommend and implement AI-related enterprise data governance policies (data quality, model transparency, security, privacy, compliance).
- Provide expert technical review and guidance to staff, incorporating direction and architectural guidance from the current Systems Architect to maintain unified enterprise design principles.

30%

Software Development & Automation

- Design, build, deploy, and maintain custom applications and services incorporating AI or machine learning (ML) components, as needed.
- Develop MLOps solutions that support model versioning, monitoring, and retraining.
- Implement automation strategies aligned with the Commission's enterprise architecture, consulting with the current Systems Architect to ensure seamless integration with legacy and modern systems.
- Administer AI platforms, cloud services, and ML frameworks while ensuring interoperability with the Commission's suite of enterprise tools.
- Lead or co-lead complex projects involving AI, databases, web applications, and automated workflows, taking input from the current Systems Architect on architectural alignment, risk considerations, and technical dependencies.

20%

Enterprise Data & Model Governance

- Collaborate closely with the existing Systems Architect on data structures, system integration patterns, and enterprise standards when designing AI data pipelines and training datasets.
- Establish policies for secure, ethical use of AI systems consistent with overall enterprise data policies.

DUTY STATEMENT

CTC-HR 101 (REV 12/2021)

10%	Technical Assistance, Support & Training Provide training to staff on AI tools and responsible use guidelines, coordinating with the current Systems Architect to ensure training aligns with broader enterprise architecture practices.
5%	<u>MARGINAL FUNCTIONS</u> Other related duties as assigned.

KNOWLEDGE AND ABILITIES

Knowledge of:

- Information technology governance principles and guidelines to support decision making.
- Software application framework design and development.
- Complex mission critical business process and systems.
- Principles, methods, and procedures for designing, developing, optimizing, and integrating systems in accordance with best practices.
- System specifications design, document and implementation methodologies and techniques.
- Machine learning concepts and algorithms
- AI system architecture, MLOps, and model lifecycle management
- Cloud AI services (e.g., Azure AI, cognitive services, ML studio)
- Responsible AI frameworks, data privacy, and model governance
- Natural language processing (NLP), computer vision, or predictive analytics techniques
- Designing APIs and services for AI model inference and data processing

Ability to:

- Analyze information and situations, identify and solve problems, reason logically, and draw valid conclusions.
- Develop effective solutions; apply creative thinking in the design of methods of processing information with information technology systems.
- Establish and maintain effective working relationships with others.
- Communicate effectively. Explain solutions to problems or questions from external users both verbally and in writing.
- Handle multiple tasks, projects and priorities.
- Work in a web based client server application environment.
- Analyze information and situations, identify and solve problems, reason logically, and draw valid conclusions.
- Develop effective solutions.
- Analyze processes for AI automation opportunities.
- Evaluate AI tools and recommend appropriate solutions.
- Translate business problems into AI/ML technical solutions.
- Communicate AI concepts to non-technical audiences.
- Ensure secure, ethical, and compliant use of AI systems.

INTERPERSONAL SKILLS

- Excellent interpersonal skills are required, as this position will be interfacing with all levels of staff within the Commission.
- Demonstrate a commitment to maintaining a work environment free from discrimination and sexual harassment.
- Maintains good work habits and adheres to all policies and procedures.
- Fingerprint clearance.

DESIRABLE QUALIFICATIONS

- Software Development Lifecycle (SDLC)
- Software application framework design and development
- Experience with modern AI/ML tools, frameworks, or cloud-based AI services.

DUTY STATEMENT

CTC-HR 101 (REV 12/2021)

- Experience designing or integrating AI/ML components into enterprise systems.
- Familiarity with data pipelines, analytics, and responsible AI practices.
- Experience with MLOps, automation, and model deployment/monitoring workflows.
- Strong understanding of system architecture, integration, APIs, and enterprise application design.
- .NET Core, C#, MVC, SQL, HTML/CSS, JavaScript/jQuery, and Entity Framework.
- Experience researching, evaluating, and testing software products and technical solutions.
- Experience analyzing business requirements and preparing technical specifications.
- Strong technical writing skills for documentation, standards, or procedures.

WORK ENVIRONMENT, PHYSICAL OR MENTAL ABILITIES

Work Environment:

- Requires use of Microsoft Teams and frequent contact with employees, and some public contact.
- Requires mobility to various areas of the Commission.
- Work business hours of 8:00 a.m. to 5:00 p.m.

Physical Ability: Must possess and maintain sufficient strength, agility, endurance, and sensory ability to perform the duties contained in this duty statement with or without reasonable accommodation

Some of the requirements above may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

PERSONAL CONTACTS

Has daily contact with Commission management, staff, and the Commission's customers.

LEVEL OF RESPONSIBILITY – ACTIONS AND CONSEQUENCES

Incumbent performs a variety of tasks in connection with the analysis, development, installation, implementation, procurement, or support of information technology systems, multifunction automated office systems, microcomputer systems, and teleprocessing networks and/or systems. Work is subject to periodic review and contact with the public is moderate. The consequence of errors is significant.

MANAGER/SUPERVISOR'S STATEMENT: ***I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE***

MANAGER/SUPERVISOR'S NAME (Print)	MANAGER/SUPERVISOR'S SIGNATURE	DATE

EMPLOYEE'S STATEMENT: ***I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT***

The statements contained in this duty statement reflect general details as necessary to describe the principal functions of this job. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absence of relief, to equalize peak work periods or otherwise balance the workload.

EMPLOYEE'S NAME (Print)	EMPLOYEE'S SIGNATURE	DATE