

LE YANG

PERSONAL INFORMATION

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PROFESSIONAL SUMMARY

Senior software engineer, full-stack developer, enthusiastic data architect. Decades of experience working with various information systems, with specialization in Altera's Sunrise platform. Solution architect for workflow analysis and system design, implementation, build, training, and activation support. Ability to create a safe and efficient patient care environment with process improvement and technology. Experience with business intelligence, data analysis, and data transformation.

CORE COMPETENCY

- critical thinking
- proven track record of project delivery results
- attention to detail
- perform well under pressure
- team leadership
- communication and interpersonal skills

PROFESSIONAL EXPERIENCE

04/2021–01/2023 | **University Hospitals** CLEVELAND, OHIO
Software Developer

- Provided clinical decision and custom content support during client's transition to another EHR.
- Developed process to allow persistent outcome tracking and handling. Improved component interaction.
- Improved system performance through code and process optimization.
- Educated team members on best practice approaches for their assigned tasks.
- Participated in internal code review to improve code quality and to aid knowledge transfer.
- Led specialty projects through requirements gathering, coding, testing, and documentation.

03/2016–06/2021 | **UK HealthCare** LEXINGTON, KENTUCKY
Senior Software Engineer, Full-stack Developer

- Developed Medical Logic Modules (MLM) using Arden Syntax standards to supplement system logic including alerts and hard stops, data integration, result processing, order generation, enforcement of adherence to workflows and automation of document or order entry.
- Planned, managed, and led the development, implementation, ongoing maintenance, testing, and support of the MLM enhancements to the enterprise clinical system.
- Monitored the system on daily to ensure data integrity, consistency, and accuracy.
- Worked with other application team members to determine strategies for meeting service-specific needs through the implementation of MLM.
- Developed Angular-based web application for discharge planning, with OData (Entity Framework and ASP.NET) backend. Web app is embedded in the hospital's electronic health record system to achieve an integrated experience for the providers.
- Integrated standard-based technologies within the Allscripts platform to deliver platform agnostic solutions to work orders and service requests.

07/2017–11/2018 | **Jefferson Regional Medical Center** PINE BLUFF, ARKANSAS
Integration Consultant

- HL7 Interface Engineer with Allscripts integration engine, eLink.
- Facilitated the planning of and execution of various integration initiatives to meet enterprise technical, security, and business requirements.
- Optimized integration and data flow strategy. Provided research data support to leadership in decision making process.
- Developed bi-directional interfaces to support data exchange between enterprise registration system (Soarian Financials), clinical system (Sunrise Clinical Manager), and various ancillary systems to support both standard messaging events and custom processes.
- Introduced documentation management system to client. Authored and maintained extensive technical documentation related to interface development and business processes.

10/2010–03/2016 | **Ascension St. Vincent**
Implementation Consultant

CARMEL, INDIANA

- Developed custom tools and tabs leveraging Allscripts ObjectPlus platform. Executed full software development cycle from requirements gathering to testing to preparation of turn-over documentation including functionality overview, workflow diagrams, and technical references.
- Developed complex MLM for clinical decision support, including many automated processes. Drafted architectural design guidelines for MLM development to improve coherence among direct and indirect execution of multiple MLMs to aid with process efficiency and to reduce failure points.
- Integrated ObjectPlus technologies with MLM development to deliver best user experience and process outcomes.
- Developed custom scripts to automate repetitive tasks: standard policy maintenance, charge maintenance, design point documents (formatting), test scripts (formatting).
- Developed custom queries for custom and ad hoc reporting, quality assurance, and feasibility analysis.
- Optimized stored procedures to improve query efficiency and accuracy.
- Led projects to implement Sunrise platform to network hospitals to enable majority system function (CPOE, Pharmacy, Emergency Care, etc.) and to meet Meaningful Use requirements. Conducted future state analysis and addressed workflow gaps.
- Led system upgrade projects. Performed impact analysis and lead design sessions, assisting end users with decisions on new functionality.
- Managed and supported system integration for Nutrition Services. Developed workflow recommendation and maintained related configuration items.
- Supported activation of various projects including big-bang CPOE rollout and system upgrades.
- Documented and categorized model system workflows, processes, and configured options.
- Conducted shared learning and knowledge sharing for team members.

07/2006–05/2009 | **BronxCare Health System**
Senior Clinical Application Analyst

NEW YORK CITY, NEW YORK

- Participated in design, build and validation for system-wide Sunrise Clinical Manager EHR.
- Worked with and reported directly to C-level executives.
- Served as team lead for customization, core, and interfaces.
- Implemented all Allscripts Sunrise modules big bang in under 13 months, on time and on budget.
- Migrated and managed 20+ interfaces to new platform across multiple domains (ADT, results, document, financial, orders) while meeting previously established requirements.
- Established protocols for product documentation and change management.

TECHNICAL COMPETENCY

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| • knowledge engineering | • test planning and execution |
| • project management | • Sunrise Clinical Manager 18.4 training completed |
| • process review and improvement | • version control practices |
| • data processing, transformation, and exchange | • cross domain knowledge |

TECHNICAL SKILLS

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|------------------------|---------------------|----------------|--------------|
| • Health Level 7 (HL7) | • Bootstrap | • XML | • PowerShell |
| • Angular | • JQuery | • XSLT | • SQL |
| • GraphQL | • Express.js | • XPath | • LaTeX |
| • OData | • ASP.NET / ASP.NET | • JSON | • Go |
| • Node.js | Core | • Arden Syntax | • HTML5 |
| • Electron | • Entity Framework | • JavaScript | • CSS |
| • Bazel | • SSIS/SSRS | • TypeScript | |
| • SQL Server | • YAML | • Python | |

CERTIFICATION

MARCH 2018 Microsoft Certified Solution Expert (MCSE): Data Management and Analytics

REFERENCES AVAILABLE UPON REQUEST

ACHIEVEMENTS

FEBRUARY 2022

DocView: Downtime

- Downtime solution developed from scratch to tailor-fit specific client requirements.
- Leveraged proven technology and frameworks—including many open-source projects—to maximize longevity and cost
- Aggregate clinical data from multiple EHR modules to allow quick, accurate, and comprehensive view of patient clinical conditions by providers.
- Scheduled delivery of downtime data ensures minimal interruption to patient care when network connectivity is limited.

NOVEMBER 2018

Discharge Process Optimization

- Angular-based single page web app hosted in SCM. Centralized tool to facilitate patient discharge where previously providers were forced to use various non-connecting modules.
- Increase efficiency of discharging workflow related to consulting services, providers, nurses, and case managers.
- Increase usability and functionality of follow up appointment request and management.
- Improve quality and content of discharge instructions given to patient.
- Guide provider workflow aligned with hospital policies and regulatory requirements.

SEPTEMBER 2018

Integration: Orchard Harvest Laboratory Information Systems

Order and results interfaces between Harvest, Sunrise Clinical Manager, HCLL (blood bank), Quest (reference lab). ADT and financial interfaces between Harvest and Soarian Financials.

MAY 2018

Integration: Soarian Financials

- Bi-directional ADT, scheduling, and financial interfaces between Soarian Financials and Sunrise Clinical Manager.
- Custom adapter to periodically query and generate batch charges.
- Automated charge reconciliation and error reporting.
- Update DRG and expected length of stay from interim coding.

APRIL 2017

CREST - Clinical Reasoning, Efficiency, and Surveillance Tools

- University of Kentucky Medical Center's premier clinical decision support tools embedded into EMR.
- A central dashboard for clinicians to review relevant and time-sensitive data in order to provide prompt clinical care to patients. Clinicians can perform various actions and interact with current chart directly from the dashboard.
- Improved clinical response efficiency by over 300% when compared to previous workflow.
- Used modern web front- and back-end technology to deliver modular, fast, and aesthetically pleasing dashboard.
- Leveraged platform API to provide tight integration and additional capabilities when used within enterprise EHR.

MARCH 2017	SCM Web Service <ul style="list-style-type: none"> • Designed and developed web service layered on top of SCM. • Provided end points for querying many clinical and business data e.g. visit, orders, documents, results, flowsheets, etc. • Provided end point to add, delete, and update custom data. • Allow rapid application development with easy data access and processing. • Filled the critical missing piece in SCM product offering.
DECEMBER 2016	Automated JCode Waste Billing <ul style="list-style-type: none"> • Respond to regulatory change to capture medication wastage, especially for high tick-eted items. • Automated waste charge entry from reported usage. • Helped organization to reduce risk of losing many thousands of dollars in reimbursement due to potential missed wastage billing.
JULY 2016	Enterprise Data Batch Update <ul style="list-style-type: none"> • Scheduled and on-demand batch update of clinical and business data. • Designed workflow to allow easy integration to update additional component. Initial release updates enterprise visit data and comment. • Provided critical support to ER tracking. • Replaced MLM-based approach that is error-prone and indeterministic.
JUNE 2016	Continuous Integration <ul style="list-style-type: none"> • Designed and setup automatic deployment and refresh of MLM upon code checking in. • Enforced deployment workflow with syntax and status checking of committed assets. • Improved accuracy and efficiency with new environment setup, such as during an upgrade.
FEBRUARY 2016	Medication Reconciliation Enhancements <ul style="list-style-type: none"> • Automatic substitution of combo medication to component orders. • Minimize order form open during admission reconciliation. • Custom prompt for mandatory/required information without complete form open. • Submission of clarification order for medications marked with pending review during admission reconciliation. • Custom discharge medication report.
FEBRUARY 2016	Non-Violent Restraint Order Renewal <ul style="list-style-type: none"> • Enforce non-violent restraint order to expire before midnight. • Prompt requesting provider upon logging into SCM to renew previously expired non-violent restraint orders. • Automated order submission from provider selection without any additional action from provider.

OCTOBER 2015	Inpatient Admission Order and Certification <ul style="list-style-type: none"> • Designed and developed workflow to meet CMS requirement on inpatient admission order and certification. • Helped to improve St. Vincent's financial integrity and outcome. • Minimal impact to existing provider admission workflow.
JULY 2015	Sunrise Clinical Manager Implementation at St. Vincent Dunn
SEPTEMBER 2014	Sunrise Clinical Manager Implementation at The Heart Center of Indiana
AUGUST 2013	Sunrise Clinical Manager Implementation at St. Mary's Health System <ul style="list-style-type: none"> • Large regional health care center with multitude of clinical services. • Total EHR replacement for inpatient, surgery, outpatient, emergency care, long term facility, and mental health services. • On time project implementation to allow successful attestation of Meaningful Use Stage I.