

HAN TRUONG

3449 W Bryn Mawr avenue • Chicago, IL - 60659

408-806-2938 • hantruongth@gmail.com • <https://www.hantruong.us> • <https://www.linkedin.com/in/hantruongth>

SENIOR SOFTWARE ENGINEER

*Oracle Java Certified Professional, Java 8 SE, Java 11 SE
Information Technology Certified Professional (ITCP), Microsoft Certified Professional (MCP)*

Highly accomplished software engineer having over 11 years of experience leading diverse technical teams in the implementation and development of major software projects. Proficient in essential development techniques such as object-oriented programming, design patterns, multithreading, security, and caching, allowing improved system performance and efficiency. Significant expertise in a broad variety of cutting-edge languages, tools, and technologies, including Java, JavaScript, RESTful API, Microservices, JeTTY, IBM FileNet, Jenkins, Git, Maven, and JUnit, as well as modern Java-based technologies like Spring (Spring Boot, Security, JPA, Rest, Data...), Hibernate, Java, Microservices, Security/OAuth2, Authentication/Authorization, REST APIs, Kafka, Docker, Kubernetes and Amazon Web Service (AWS), Azures, GCP.



SCAN ME

Software Development • Web Services • Enterprise Applications • Design Patterns • Database Development
Java Collections • Test Cases & Scenarios • Performance Optimization • Multithreading • Virtualization
PL/SQL • Authentication & Authorization • Networking (Telnet, SSH, VPN, DNS, etc.) • Caching & Messaging

Languages: Java, TypeScript

Web: Angular, NodeJs, JavaScript, AJAX, JSP, Servlet, XML, HTML5, CSS3, Bootstrap, PHP, TypeScript

Web Services: Web Services (SOAP and REST), RESTful API.

Web/App Servers: Tomcat, JeTTY, WebSphere, Nginx, JBoss

Frameworks: Spring (Core, MVC, REST, Security, AOP, Data, Boot, JMS...), Hibernate, JSF, Entity Framework, Angular, ExpressJS, JPA, Swagger UI, Selenium, NodeJS, Testing (JUnit, Cumber-JVM, EasyMock, Mockito, PowerMock)

Databases: MS SQL, MySQL, PostgreSQL, Oracle, Sybase, MongoDB, DynamoDB

Design Patterns: Singleton, Factory, MVC, Façade, Observer, Composite, Prototype, Builder, Command
SDLC: Agile/Scrum, Waterfall, V-Shaped Model, TDD.

Tools: IntelliJ, Eclipse, Visual Studio Code, STS, Postman, Robot 3T, PyCharm, WebStorm, Jenkins, Git, JIRA, Maven, Gradle, JUnit

Platforms: MacOS, Linux, CentOS, Windows, Amazon Web Services (AWS), Azure, Google Cloud

Big Data: Hadoop, Spark

CI/CD Tools: Jenkins, Terraform, Ansible, Docker, Kubernetes

Amazon Web Services: EC2, Load Balancing, Lambda, SNS, SES, S3, Route 53, Elastic IP...

Google Cloud: VMs, Networking, Firebase, Realtime Database...

Azure Cloud: VMs, Networking...

Virtualization: VMware vCenter Server, Oracle VirtualBox, Hyper-V.

PROFESSIONAL EXPERIENCE

CME GROUP, Chicago, IL, U.S • 02/2020 – Present

Senior Software Engineer: Working in multiple projects and products: Transformer, BrokerTec, NEX...

Tasks Performed:

- Implement the back-end functionality to generate bonds/repo instruments, handled/proceeded the Kafka messages from other applications and systems, implemented Restful API to interact with front-end and apps.
- Design overall architecture of the multi-threaded and synchronization software applications and scalable systems, which are able to handle large data volumes, low-latency, high availability and performance using advanced technologies IT software development, such as Java, Microservices, Spring, Spring Security/OAuth, Spring Boot, REST APIs, Hibernate, Kafka, Docker, Kubernetes and Amazon Web Service (AWS).

- Design, implement, maintain and deploy the responsive web-based applications and systems that are required high-volume, high availability and performance for the mission-critical systems using Web Services (SOAP and REST), Kafka, Java-EE platform with Servlets, JSP, JDBC, Multithreading, Spring MVC, Spring Boot.
- Conduct software analysis, developing, testing, and debugging for the systems/software for large business environments.
- Perform the full software development life cycle involving design, implementation, testing, launching, producing releases of software components.
- Integrate platform to external APIs and interfaces for authentication, authorization and encryption using OAuth2, Two-Factor Login (2FA), OTP, RSA and DES.
- Drive design and implementation of durable and software solutions that will solve critical customer problems in a limited timeframe, provide the hot-fix and solutions to quickly resolve the customer's critical issues.
- Propose technical design and implement highly available, scalable, and secure web services, create scalable object-oriented RESTful web services and applications by applying the principals of software engineering development, SOLID principals, Object-Oriented Programming (OOP) and software design patterns such as Command, Builder, Composite, Adapter...
- Implement the distributed/scalable systems and high-volume transaction applications, handling a large numbers of requests per second.
- Work with cross-functional team members from Architecture, Product Management, Q/A and Production Operations to design, develop, test, release and launch new features.
- Develop and propose the best technical design and approach for new requirement/request from clients.
- Analyze the issues using log analysis tools, like Splunk.

Achievements:

- Deliver successful highly available, scalable, multi-threaded Transformer application, which can handle and process a hundreds of thousand messages, no performance issues so far.
- Quickly replicate the Transformer systems into another product application called EBS, thanks to the well-designed system and approaches.
- Design and implement the highly available, scalable enterprise software systems and software for large business environments.

Technologies Used: Java, Spring, Spring Security/OAuth, Spring Boot, REST APIs, Hibernate, Kafka, Docker, Kubernetes/Jenkins and Amazon Web Service (AWS), JIRA, Agile methodology, Oracle Database, JUnit, Mockito, Multi-threading, SQL, NoSQL, JDBC, REST APIs & Microservices (RESTful, SOAP, API), CI/CD tools Jenkins, Ansible, Selenium, and processes, OAuth2, Two-Factor Login (2FA), OTP, RSA and DES.

TICKET MONSTER INC, Ho Chi Minh City, Vietnam • 2018-2019

Vietnamese extension of one of the top 3 e-commerce companies in Korea.

Senior Software Engineer: Led 8-member technical team in the development and implementation of products, technical solutions, and internal security systems.

Tasks Performed:

- Built code structure, skeleton code, implemented RESTful API and front-end to visualize and display data.
- Implemented the front-end using Angular, bootstrap with HTML5/CSS3, database design and SQL procedure. Integrated products with existing systems and third-party programs.
- Collaborated with product owners and management to ensure completion of project requirements.
- Integrated with TMON's existing system, applying API filter and security, provided the bug-fix and improved performance, proposed technical solutions, security solutions.

Achievements:

- Analyzed and optimized deployed projects for high-performance queries and searching.
- Recognized for leadership, efficiency, and technical abilities.

Technologies Used: Java, TypeScript, Spring (Boot, Security...), REST, AngularJS, MySQL, MS SQL, Azure, Telnet, SSH, VPN, IntelliJ, Maven, Jenkins, DBEaver, Aqua, Postman, OAuth2, JWT, Tomcat, JPA, NodeJS

DECISION SCIENCE AGENCY, Singapore • 2017-2018

Local software outsourcing company which develops projects for clients.

Java Technical Leader: Designed and developed core features, extended functionality, and software solutions.

Tasks Performed:

- Built RESTful API back-end code structure and developed API back-end to provide services for mobile applications and external services. Integrated AIA's existing database using microservices. Proposed technical, security solutions, provided the bug-fix and improved the performance.
- Investigated and fixed bugs, improved performance, and implemented batch job services for data backup.
- Supported team during database design and data migration. Collaborated with AIA IT team to integrate application with AIA's existing system for authentication, including sending SMS for OTP token.
- Set up production environment with SuSE OS, Apache/reverse proxy, NAT configuration, and DNS.
- Led 15 members (4 Android developers, 4 iOS developers and 6 API Backend developers)
- Supported team to implement Batch Jobs services to import data nightly.
- Set up PROD environment using Suse OS, Apache Proxy/Reverse Proxy, configure NAT, DNS.

Achievements:

- Supervised 15 team members consisting of 4 Android developers, 4 iOS developers, and 6 API back-end developers.
- Improved system performance and response time to SQL queries.
- Deployed project successfully to AIA's existing environment and ran as production.

Technologies Used: *Java, Spring (Core, Security), REST, SOAP, RPC, Microservices, Hibernate, Sybase, OAuth2, 2FA, OTP, Ehcache, Telnet, SSH, VPN, IntelliJ, Maven, DBeaver, Aqua Data Studio, Postman, Tomcat, JBoss, SuSE, AWS, Apache Proxy, DNS*

SUNRISE SOFTWARE SOLUTION CORP, Ho Chi Minh City, Vietnam • 2014-2017

Top software outsourcing company in Vietnam.

Java Technical Leader: Acted as team leader on multiple client-based software development projects.

Tasks Performed:

- Built project skeleton and API back-end service and applied API authentication.
- Implemented RESTful API back-end features for mobile web applications, web services, and frameworks.
- Designed databases and provided technical solutions to data issues, provided technical solutions, security.
- Developed functions as modules of OSGi model using Java, Spring framework, and OSGi framework.
- Gathered project requirements and converted into technical documents and architecture plans.
- Identified bugs, providing troubleshooting and repair to improve performance.
- Developed and executed test cases and test scenarios.
- Deployed and managed product services on AWS Cloud Web Services

Achievements:

- Led up to 8 diverse team members in complex application development.
- Solved major server performance issues, reducing required memory allocation after years of operation.
- Communicated with customers in many different countries, ensuring full satisfaction.

Technologies Used: *Java, Shell Script, Spring (Core, Data, Security), Hibernate, REST, OSGi, MongoDB, DynamoDB, MS SQL, PostgreSQL, JPA, Swagger UI, Selenium, Elasticsearch, Ehcache, RabbitMQ, Gradle, Eclipse, Robomongo, RockMongo, Maven, PuTTY/SecureCRT, JeTTY, Tomcat, IntelliJ IDEA, JSystem, TestNG, XStream, VMware (vSphere, vClient), ESXi, Oracle VirtualBox, Postman, CGN, Telnet, VPN*

SMS MANAGEMENT & TECHNOLOGY, Ho Chi Minh City, Vietnam • 2010-2014

International Information Technology enterprise and management solution provider.

Software Engineer: Key contributor to development of desktop systems, platforms, and frameworks.

Tasks Performed:

- Developed and integrated back-end components using Java-based technologies.
- Implemented front end interfaces and widgets with HTML5, CSS3, and JavaScript.
- Designed and modified workflows in IBM FileNet.
- Interacted with Selenium to implement features (keywords) for automation framework.
- Implemented unit tests using Selenium, JUnit, Mockito, EasyMock, and PowerMock.
- Implemented and maintained the system's front-end via HTML/CSS
- Implemented modules to interface with LDAP for authentication

Achievements:

- Collaborated with project managers to finalize requirements, system architecture, and technologies used on all projects.
- Built successful automation framework for testing, currently used by clients.

Technologies Used: *Java, Spring (Core, MVC, JMS, Security), Hibernate, REST, Servlet, JavaScript, Jersey, JAX-RS, Dojo, Entity Framework, WebSphere, JRules, Lucene, Jenkins, Maven, Selenium, JUnit, Mockito, EasyMock, PowerMock, Oracle, SOAP, JPA, Tomcat, Active Directory, LDAP, IBM FileNet*

ACADEMIC PROJECTS

NextData, MUM (2019): Real time monitoring dashboard management and sales solution, providing powerful features for managers or business owners to view business performance visually and in real time. **Technologies Used:** *NodeJS, ExpressJS, MongoDB, Hadoop, Spark, Spark Streaming, Angular, HTML5, CSS3, Bootstrap, JWT, Mongoose, Node-Cron, Ng2-Charts, Chart.js, Nginx, AWS Cloud Web Services*

Furniture Market, MUM (2019): E-commerce web application for furniture sales, providing features such as ordering, product management, sales, and seller management. **Technologies Used:** *Java, Spring (Boot, MVC, REST, Data, Security), CSRF Token, HTML5, CSS3, Bootstrap, jQuery, AJAX, Thymeleaf, AWS Cloud Services*

EDUCATION

Master of Science in Computer Science

Maharishi International University – Fairfield, Iowa, USA (01/2021)

Master of Engineering in Information Technology Management

Vietnam National University – Ho Chi Minh City, Vietnam (2014)

Bachelor of Science in Information Technology (2009)

Vietnam National University – Ho Chi Minh City, Vietnam

PROFESSIONAL DEVELOPMENT

Oracle Java Certified Professional, Java 8 SE, Java 11 SE
Information Technology Certified Professional (ITCP) - Toronto, Canada
Microsoft Certified Professional (MCP)
Cisco Certified Network Associate (CCNA)
Certification of Software Design & Architecture – University of Alberta, Canada
IBM FileNet Certified Professional (Business Process Manager & Content Manager)