

JIHED AMINE MAAREF

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TECHNICAL STRENGTHS

Java Backend	JUnit, AssertJ, Mockito, IBM MQ, RabbitMQ, Spring Framework (IoC, MVC, AOP, Test), JPA, Hibernate, Logback, Solr...
Other JVM Languages	Kotlin, Scala, Groovy
Databases	IBM DB2, PostgreSQL, MySQL, Oracle 9i, 10g, Apache Derby
Various Tools	git, Gradle, Maven, Ant, Sonar, Jenkins CI, Jprofiler, Java Mission Control, Docker, Vagrant, VI
Application Servers	JBoss Wildfly, Apache Tomcat (administration and securing)
IDEs	IntelliJ IDE, Eclipse IDE
Third-party software	Netsuite/Intacct ERPs, Alfresco CMS, Liferay portal, Nuxeo CMS

EDUCATION

UQAM (Université du Québec à Montréal) 2009 - 2010
Master of Science in Software engineering Montreal
• GPA: 4.05/4.3
• Thesis with high honours

Université Libre de Tunis 2005 - 2008
National Diploma of Engineer (Equivalent to a Bachelor) Tunis
• Thesis with high honours
• Elected to take part in an international exchange program with Laval University in Quebec

ISI (Institut Supérieur d'Informatique) 2001 - 2005
Diplôme Universitaire Technologique Tunis
• Specialization in Software Development
• Passed with honours

EXPERIENCE

TradingScreen Inc. March 2019 - March 2020
Senior Java Developer, OEMS Montreal
• Profiled, detected and fixed memory leaks in the unit test suits leading to a reduction in the teamcity build job duration for the core project from 30 mins to 18 mins
• Contributed major features on the biggest EMS project of the company.
• Designed and developed Algowheels to route baskets and waves of orders to different brokers using different trading algorithms as defined in the algowheels.
• Designed and developed the component to handle grouping opportunities for orders and alert users about them in the UI. Automatic cleanup / update of the grouping in-memory map as orders are no longer eligible / become eligible for grouping.
• Overhauled the grouping features initial implementation using the observer/listener pattern and broke down the grouping processing into dedicated processors.
• Multiple other features and bugfixes, code refactorings.
• Handled releases for 2020 to UATDev, UatProd and Prod environments. Investigated release issues and followed up with the relevant teams.

Morgan Stanley**February 2017 - March 2019***Institutional Securities Technology, Associate*

Montreal

- Designed and developed multiple features in the Vista Allocation System which is a critical system at Morgan Stanley, responsible for allocating millions of trades daily for equities, listed derivatives and swaps.
- Technology stack includes Java 8 / Spring / IBM MQ / DB2 / Sybase
- Personally overhauled the allocation algorithm responsible for allocating listed derivatives and cash trades for major markets (NA, Brazil, Japan, Spain). Introduced a critical improvement that made allocations which previously took days to allocate get allocated in minutes. The updated algorithm has been deployed in production for months and not a single allocation timeout occurred since the deployment.
- Designed a new allocation algorithm that is able to distribute executions on allocations in order to achieve specific average prices per allocations, to meet a market's requirement. Wrote Unit Tests that randomly generate trades with different allocation prices and check that the new allocation algorithm produces the expected average prices for the test trades.
- Designed and implemented many critical features, including integration tools with other systems to automatically report issues on trades, handling late session trades for listed derivatives, splitting allocations based on specific fields, overriding booking accounts to handle Brexit migration, etc.
- Frequent interactions with operations users to establish requirements, investigate production issues, etc.
- Wrote multiple stored procedures in DB2, profiled code with JProfiler, setup a new project with Sonar integration which achieved 90% tests code coverage.

Nexonia**December 2015 - February 2017***Java Backend Developer*

Montreal

- Designed and developed the integration of Nexonia's system with Cytric Travel Management using REST API, JAXB, RabbitMQ, JDBC, etc (automatic booking of trips to Cytric from Nexonia, automatic creation of expense reports based on booked trips, attachment of booking receipts to expense reports)
- Designed and developed an expense payment integration with partner Radius using WSDL webservices.
- Designed and developed a gradle based webapp to handle WSSE authentication with a major partner (300+ clients), communication between internal webapps via messaging queues, authentication token encryption using private keys...
- Developed features to integrate with financial institutions including integration with Finicity banking transactions feed, handling Canadian Remittance Format, support of various credit card formats processing...
- Developed features to integrate with ERPs (Netsuite, Intacct, etc) including linking bills to purchase orders when exporting to NetSuite, importing/exporting project resources and timesheets from/to NetSuite...
- Bug fixing and maintenance including writing database queries to execute in production, performance optimization, etc.

Savoir-faire Linux (SFL)**May 2013 - December 2015***Java Consultant*

Montreal

- Achievement of multiple mandates for high profile governmental clients (ASSSL, CRIQ, Kingston City...).
- Proofs of concept for conferences on Alfresco and electronic document management in Quebec. Maintenance and enhancement of SFL's internal Content Management System
- Jonco Die: Development of Talend Migration Jobs to migrate over 10 years of financial data from Sage Comptable to Odoo opensource ERP. Handling of account balancing, full and partial reconciliation for fiscal periods.
- STM (Société des Transports de Montréal): Migration of STM's Nuxeo ECM from 5.5 to

6.0 (Upgrade to JSF 2.0, Richfaces 4). Development of new features for the archiving module. Bug fixing and various enhancements.

- ASSSL (Agence de la sante et des services sociaux des Laurentides): Customization of Alfresco Records Management. Development of a document archiving workflow. Migration of Alfresco CMS from version 3.4 Community to 4.1 Enterprise with over 100 Go of data and more than a hundred users. Upgrade of customizations written in Java (webscripts) and Javascript/CSS to Alfresco enterprise 4.1.
- CRIQ (Centre de recherche industrielle du Quebec): Add, edit and view subsidiary files in CRIQ's Liferay portal for their Horace client. Development of custom Liferay portlets and hooks. Tweaking of caching, performance optimization. Implementation of a reports module and a custom Lucene Search with auto-suggestion and user permissions control.

**Chaire de Logiciels Libres, social and solidary
finance**

December 2010 - May 2013
Montreal

Software Analyst

In a team of two software analysts, I designed and implemented the whole business layer of a loan management application

- REST Services in Spring 3 MVC
- JPA 2 / Hibernate to persist data in a PostgreSQL DBMS
- PL/SQL scripts to migrate production data
- Full-text search with Apache Solr and Electronic document management with Alfresco
- Creation of PDF reports (iText) and charts (JFreeChart)
- CMS (git) and continuous integration (Jenkins CI) under Ubuntu LTS with over a hundred integration tests
- Installation, administration and securing of the environment (Apache Tomcat Servers, PostgreSQL, Alfresco, Solr...)
- Development of an administration web application using Grails

UQAM

January 2009 - December 2010

Teaching assistant

Montreal

Teach in the laboratory sessions - design exercises - correct assignments.

- Distributed applications: Sockets, CGI, Servlets, XML processing (SAX, DOM)
- Operating systems: Processes, pipes, Unix Shell, System programming in C
- Java: OO fundamentals, Java collections and unit testing with JUnit
- Design: Explanation and practical use of design patterns (Strategy, Observer, State, Command...)
- Software building and maintenance: C programming in Unix, modularity, debugging (gdb) and configuration management (make, git)

CERTIFICATIONS

- Oracle Certified Associate, Java SE 8 Programmer
- Liferay 6.2 Certified Professional Developer
- Kotlin for Java Developers course on Coursera done with an overall 100% grading

EXTRA ACTIVITIES

- Open source repositories (<https://github.com/jihedamine>)
- Amateur swimmer and classical guitar player