# JIHED AMINE MAAREF

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#### **TECHNICAL STRENGTHS**

Spring Framework (IoC, MVC, AOP, Test), JPA, JUnit, Mockito, Hibernate **Java Backend** 

IBM MQ, RabbitMQ, Logback, iText, Solr...

**Databases** IBM DB2, PostgreSQL, MySQL, Oracle 9i, 10g, Apache Derby

Gradle, Maven, Ant, Sonar **Build/Project management tools** 

Other JVM Languages Scala, Groovy

**Application Servers** JBoss Wildfly, Apache Tomcat (administration and securing)

**Various Tools** git, VI, Jenkins CI, JProfiler, Docker, Vagrant, docbook

**IDEs** Intellij IDE, Eclipse IDE

Third-party software Netsuite/Intacct ERPs, Alfresco CMS, Liferay portal, Nuxeo CMS

# **EDUCATION**

# UQÀM (Université du Québec à Montréal)

Master of Science in Software engineering

2009 - 2010 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)

Diplôme Universitaire Technologique

2001 - 2005

Tunis

- · Specialization in Software Development
- · Passed with honours

#### **Bourguiba Pioneer High School**

Baccalauréat (Undergraduate) in Mathematics

1994 - 2001

Tunis

· Pioneer school, admittance upon succeeding in a national exam

#### **EXPERIENCE**

#### **Morgan Stanley**

Institutional Securities Technology, Associate

February 2017 - March 2019 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 occured 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 and achieved 90% tests code coverage, etc.

Nexonia Java Backend Developer December 2015 - February 2017 Montreal

- · Designed and developed the integration of Nexonia's system with Cytric Travel Management using REST API. JAXB, rabbitmg, 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 Radius partner 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

Montreal

Iava Consultant

- · 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 Java Consultant (on behalf of SFL) August 2015 - December 2015

Montreal

- · Development of Talend Migration Jobs to migrate more than 10 years of financial data from Sage Comptable to Odoo opensource ERP
- · Handling of account balancing, full and partial reconciliation, fiscal periods, etc

## STM (Société des Transports de Montréal)

Java Consultant (on behalf of SFL)

September 2014 - April 2015

Montreal

- · Migration of STM's Nuxeo Electronic Content Management System from 5.5 to 6.0
- · Archiving module: Development of new features and upgrade from Nuxeo 5.5 to 6.0 (Upgrade to JSF 2.0, Richfaces 4)
- · Bug fixing, various enhancements

Java Consultant (on behalf of SFL)

# ASSSL (Agence de la santé et des services sociaux des Laurentides)

January 2015 - February 2015

Montreal

- · Customization of Alfresco Records Management
- · Development of a document archiving workflow

# ASSSL (Agence de la santé et des services sociaux des Laurentides)

May 2014 - July 2014

Java Consultant (on behalf of SFL)

Montreal

- · Migration of Alfresco CMS from version 3.4 Community to 4.1 Enterprise with more than 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
- · Debugging of performance bottlenecks, Improvement of document conversion performance.

# CRIQ (Centre de recherche industrielle du Québec)

January 2014 - July 2014

Java Consultant (on behalf of SFL)

Montreal

- · Add, edit and view subsidiary files in CRIQ's Liferay portal for their Horace client
- · Development of custom Liferay portlets and hooks
- · Connection to an external database using liferay service (via Hibernate), tweaking of caching, performance optimization

- · Implementation of a reports module
- · Implementation of custom lucene Search with auto-suggestion and user permissions control

**Kingston City, ON** 

January 2014 - May 2014

Java Consultant (on behalf of SFL)

Montreal

- · Migration of Kingston City's Liferay portal from version 6.0 to 6.1 GA 2 EE
- · Migration of custom modules developed by Kingston city to Liferay 6.1 GA 2 EE

# Chaire de Logiciels Libres, social and solidary finance Software Analyst

December 2010 - May 2013

Montreal

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
- · Electronic document management with Alfresco
- · Creation of PDF reports (iText) and charts (JFreeChart)
- · CMS (git) and continuous integration (Jenkins CI) under Ubuntu LTS
- · More than a hundred integration tests
- · Installation, administration and securing of the environnement (Apache Tomcat Servers, PostgreSQL, Alfresco, Solr...)
- · Development of an administration web application using Grails
- · Technical documentation written with docbook

**UQÀM**January 2009 - December 2010
Teaching assistant
Montreal

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

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

### **CERTIFICATIONS**

- · Oracle Certified Associate, Java SE 8 Programmer
- · Liferay 6.2 Certified Professional Developer

#### **EXTRA ACTIVITIES**

- · Member of Montreal JUG (Montreal Java User Group) and Montreal Scala User Group
- Open source repositories (https://github.com/jihedamine)
- · Amateur swimmer and classical guitar player