## **CURRICULUM VITÆ**

(English version available, starting at page 6)

## **André Masson**

## Développeur Mobile & Fullstack Java/Kotlin/Dart/React/Node

## **SOMMAIRE DES COMPÉTENCES**

M. Masson est un analyste-programmeur possèdant 15 années d'expérience en finances, en assurance, dans le domaine de l'enseignement, de la gestion documentaire et pour le gouvernement. Il est expert en technologies Mobile / Web / SOAP, expérience qu'il a acquise lors de ses multiples mandats en développement d'application mobiles, JEE et de sites web.

- Forte aptitude en analyse des besoins fonctionnels et techniques (OOA, UML)
- Analyste programmeur expérimenté : Dart / JAVA / Kotlin / Groovy / SQL / Angular / React Native / Flutter
- Formateur Java chez Technologia : Spring Boot, Web Services, Servlets API 3
- Compétences avancées en développement d'application distribuées n-tiers et SPA (Single Page App) via Angular, React
- Très bonne capacité à collaborer et à communiquer avec les utilisateurs et experts fonctionnels
- Connaissances approfondies des différents pôles du génie logiciel (analyse, configuration logicielle, test, qualité, conception, implémentation, processus, maintenance, etc.)
- Excellente maîtrise du français et très bonne maîtrise de l'anglais (parlé, et écrit)

## **Projets Open Source**

Devinez le texte Depuis 2021

Création du projet open source déployable sur plusieurs plateformes : Linux, Android, iOS (iPhone), Webapp, MacBook et Windows. L'application est un jeu éducatif évolutif et permet d'être un projet porter pour établir des standards de développement natifs via le framework Flutter

- https://github.com/amwebexpert/guess the text
- architecture technique de l'app, design de solution et développement actif
- conception d'écrans et d'animations, thème, typographie, dark mode, préférences, persistance locale
- tests unitaires et behaviorals automatisés, tests end to end, rapport de couverture de code
- structure evolutive du code source, choix des libraires open source
- intégration des API Rest et/ou GraphQL
- ingestion de dépendances IoC dans l'api
- mise en place des bonnes pratiques, guide de développement, revues de code

Technologies FE: Flutter, Dart, MobX, Sembast, SQFlite, Getlt, Freezed

Technologies BE: Node.js, NestJS, Typescript (API REST déployé sur plateforme Heroku)

WebToolbox Depuis 2020

Création du projet open source web contenant des outils et utilitaires pour développeurs

- https://github.com/amwebexpert/etoolbox
- architecture technique de l'app, design de solution et développement actif
- conception d'écrans, thème, typographie, dark mode, préférences, persistance locale
- cas d'utilisation : décodage JWT token, Parsing JSON, Transformation JSON en différents langages, générateur codes QR, générateur UUID...

Technologies FE: React, Typescript, Material-UI, Redux, WebSockets

Technologies BE: Node.js, Typescript, WebSockets

## **EXPÉRIENCE PROFESSIONNELLE**

Voonyx Mandat chez Beneva (La Capitale & SSQ) Senior Fullstack Engineer Depuis Mars 2021

Dans le cadre de ce mandat, il prend part à l'architecture et développement de l'application mobile de Beneva en utilisant les principes de sécurité OAuth2 et le l'approche *material design* pour l'interface utilisateur native.

- POC: Flutter, React Native, Auth0, Firebase, React Native & WebView integration
- Design UI (visual components)
- Design BE REST and GraphQL API

Environnement: React 17.x, React Native, Paper, React Navigation, React Query, Axios, Typescript, Node.js, NestJS, GraphQL, Firebase: Authentication and Analytics, POC using Flutter and Auth0, Git, Métho Agile, Scrums, Jira

#### Upwave

Senior Software Engineer Février 2020 – Mars 2021

Dans le cadre de ce mandat, il prend part à la conception, l'architecture et le développement d'applications RESTful (Spring ReST, micro services) avec la partie SPA (React) qui composent la plateforme de consultation des statistiques via des diagrammes d'affichage graphiques.

- Desing/program new web REST Json APIs
- Design UI visual components

Environnement: React 16.x, Redux, TypeScript, Material-UI, JEE, Groovy, Spring Boot 2.x, Spring Data, Spring Security, Spring Rest, Oauth2, IntelliJ IDE, Tomcat, Git, Flyway, Spock, Graddle, Git, Métho Agile, Scrums, Jira

## Desjardins GRP et Orchestrateur FSDF

Senior Software Engineer Janvier 2019 – Janvier 2020

Dans le cadre de ce contract, il prend part à la conception, l'architecture et le développement d'applications RESTful (Spring ReST, micro services) avec la partie SPA (React, Angular) qui composent la plateforme de gestion de recouvrement de prêts.

- Desing/program new web REST Json APIs
- Design UI visual components

Environment: React 16.x, Redux, Axios, TypeScript, Angular 8, @ngrx/store, Twitter Bootstrap, RxJS, JEE, Kotlin, Spring Boot 2.x, Spring Data, Spring Security, Spring Rest, Oauth2, IntelliJ IDE, Tomcat, Git, Flyway, jUnit 5, Maven, Pivotal Cloud Foundry, Concourse, Apache POI, Open PDF, H2, Hateoas, Git, BitBucket, Métho Agile, Swagger, Scrums, Jira

## ActiVia Networks Digital Menu Board

Senior Software Engineer Octobre 2017 – Octobre 2018

Dans le cadre de ce mandat, il prend part au développement d'applications RESTful (Spring ReST) qui composent la plateforme de gestion des menus affichés dans les commerces et restaurants.

- Desing/program new web REST Json APIs
- Design UI visual components

Environment: GWT, TypeScript, Angular 5.x, Twitter Bootstrap, RxJS, JEE, Spring 4.x, Spring Boot, Oauth2, IntelliJ IDE, Tomcat, Git, Liquibase, HTML5, CSS3, Servlet-API, jUnit, Easy-Mock, Maven, Team City, Méthodologie Agile, Scrums, Jira

## ACCEO Solutions Inc. Transphere platform

Team Lead & Senior Software Engineer Octobre 2013 – Octobre 2017

Dans le cadre de ce mandat, il a participé au développement d'applications RESTful (Jersey) qui composent la plateforme de gestion de transactions de cartes de crédit et de prélèvement bancaires automatisés.

- Team leader
- Desing/program new web REST Json APIs requested by product owner

Environment: TypeScript, Angular4.x, RxJS, JEE, Spring 4.x, Oauth2, Eclipse, Tomcat, SVN, Git, JavaScript/jQuery, JAX-RS Jersey, Flyway, HTML5, CSS3, Servlet-API, Velocity, jUnit, Mockito, MyBatis, Maven, Jenkins, SoapUI, Apache CXF, JAXB 2.x, Méthodologie Agile, Scrums, Jira

## Fédération des Caisses Desjardins du Québec Acquisitions de Fonds en ligne

Team lead, Analyste Programmeur Sénior Février 2011 – Septembre 2013 (29 mois)

Dans le cadre de ce mandat, il a développé une approche SOA pour un arrimage entre une application web classique et le portail AccesD. Cette approche permet à l'application distante d'être développée in-dépendamment du portail et du Framework AccesD.

- Analyser la communication inter-applications (Protocol http entre AccesD et application distante);
- Protocole d'échange applicatif entre AccesD et l'application distante;
- Concevoir et développer la partie Filtre java de l'application distante;
- Concevoir et implanter l'application Spring MVC 3.x

Environnement: JEE, SOA, Apache Camel, JAX-WS, CXF, Spring-WS (Projet NEI), Maven, WebLogic, SunOne-iPlanet, WebSphere Tomcat, Jetty, Eclipse, CSV, JavaScript/jQuery, DOM, DHTML, CSS3, Servlet-API, Spring MVC, Velocity, Twitter Bootstrap, PIE.htc, jUnit, Mockito, JPA2, Hibernate, Méthodologie Agile, Scrums, Jira

Dans le cadre de ce mandat, M. Masson a effectué le débuggage, la conception et la programmation dans le cadre d'une application web Java Struts d'intranet d'entreprise pour Hydro Québec

- Correction d'anomalies existantes dans l'application
- Conception/implémentation de nouvelles fonctionnalités de l'application
- Conception/implémentation d'un TagLib de convertion Excel vers HTML5/Ajax

Environnement : Serveur JEE, Oracle Database, Struts 1.x, jBoss, Sécurité LDAP, Eclipse, Subversion, Ant, Spring, JSP, JSTL, TLD (Tag Libraries Definition), JavaScript, Apache POI, DOM, XML, CSS3, jQuery, jUnit, Mockito. Contexte Agile, Outils Jira et Rally.

## Caisse de dépôt et de placement du Québec Refonte Data1

Conception et Programmation Mai 2008 à Mars 2009 (11 mois)

Dans le cadre de ce mandat, M. Masson a effectué la conception de deux consoles d'intégration web et Windows pour intégrer plusieurs outils existants.

- Conception/implémentation du framework de la console web Java Struts 2
- Conception/implémentation du framework de la console windows C# .NET
- Implémentation de du module de collecte des fichiers de données
- Conception/implémentation des technologies client permettant l'intégration de Microsoft Excel à Unix via VBA et SSH Automatisé

Environnement: C# .NET pour composantes client, Serveur JEE, Struts 2, Tomcat, Sécurité Acegi avec LDAP, Eclipse, CVS, Ant, Spring, iBatis, JSP, Tiles, JSTL, TLD (Tag Libraries Definition), jUnit, Mockito, TesNG, JavaScript, XML, DOM4J, CSS3, MySQL, SQL Server

#### Axa Assurances Soumissions et contrats d'assurances en ligne

Conception et Programmation Juillet 2006 à Juin 2008 (20 mois)

Dans le cadre de ce mandat, M. Masson a programmé le module de recherche de polices d'assurances, le module des garanties automobiles ainsi que le renouvellement automatisé des polices d'assurances. Dans ce contexte, il s'est vu confier les activités suivantes :

- Conception/implémentation du module de recherche web au niveau Proxy, JSP, JSTL
- Implémentation de du module de garanties web au niveau Proxy, JSP, JSTL
- Conception/implémentation de méthodes de services pour les renouvellements de police d'assurance automobile automatisés

Environnement : jBoss, BPEL, ESB ServiceMix, Maven, Eclipse, Subversion, Ant, Spring, Hibernate, iBatis, Quartz, JSP, JSTL, TLD (Tag Libraries Definition), JavaScript, DOM, XML, XHTML, CSS3, AS400, DB2, Méthodologie Agile, Scrums

## **RESUME**

## André Masson

## Mobile & Fullstack Java/Kotlin/Dart/React/Node

## CAREER PROFILE

Mr. Masson has 15 years of experience working on large-scale software design projects for financial, government, insurance organizations and has developed mobile apps and BE REST Api for many web applications using Flutter / React-Native / JAVA / Kotlin / PHP technologies.

- Strong talent in requirement and functional analysis (OOA, Use Case Study, UML)
- Software engineer cumulating many years of experience in programming Dart / JAVA / Kotlin / Groovy / SQL / Angular / React Native / Flutter
- Technologia Teacher: Spring Boot, Web Services
- Advanced knowledge of N-Tier distributed application and SPA (Single Page Apps)
- Excellent collaborator and ability to communicate with users and functional experts
- In-dept knowledge of application development and software engineering (analysis, software configuration, test, quality, coding, implementation, process and maintenance, etc)
- Strong interest in business process improvement and reengineering
- French and English communication (speaking / writing)

## **Open Source Projects**

Guess the text Since 2021

As part of this open source project, he is creating an application deployable on several platforms: Linux, Android, iOS, Webapp, MacBook and Windows. The application is an evolving educational game. The goal is to establish native development standards applied to a real world application deployed on production via the Flutter framework.

- https://github.com/amwebexpert/guess\_the\_text
- app technical architecture, solution design and active development
- screen and animation design, theme, typography, dark mode, preferences, local persistence
- automated unit and behavioral tests, end to end tests, code coverage report
- evolutive structure of the source code, choice of open source libraries
- integration of Rest and/or GraphQL APIs
- dependencies injections pattern (IoC) for the whole application
- implementation of best practices, development guide, code reviews, training sessions

Technologies FE: Flutter, Dart, MobX, Sembast, SQFlite, GetIt, Freezed

Technologies BE: Node.js, NestJS, Typescript (REST Api deployed on Heroku)

WebToolbox Since 2020

Open source single page app project runnning in Electron but also deployable as a simple web application. Collection of developer tools and programming utilities

- https://github.com/amwebexpert/etoolbox
- app technical architecture, solution design and active development
- screen design, theme, typography, dark mode, preferences, local persistence
- <u>Use cases</u>: parsing JWT token, JSON to programming language, QR code generation, etc.

Technologies FE: React, Typescript, Material-UI, Redux, WebSockets

Technologies BE: Node.js, Typescript, WebSockets

## **WORK EXPERIENCE**

## Voonyx Mandate at Beneva (La Capitale & SSQ)

Senior Fullstack Engineer Since March 2021

As a full-stack engineer, participate in development and architecture of the Beneva native mobile application using OAuth2 security pattern and *material design* principles for the user interface.

- POC: Flutter, React Native, Auth0, Firebase, React Native & WebView integration
- Design UI (visual components)

Environement: React 17.x, React Native, Paper, React Navigation, React Query, Axios, Typescript, Node.js, NestJS, GraphQL, Firebase: Authentication and Analytics, POC using Flutter and Auth0, Git, Agile environment with scrums, standups and Jira

#### Upwave

Senior Software Engineer Fev. 2020 – March 2021

As a full-stack engineer, participate in development of a React/Redux based data-visualization dashboard that customers use every day to guide how they spend their marketing budgets. Lots of cool, self-serve features that require robust technology.

- Desing/program new backend REST Json APIs
- Design UI visual components

Environnement: React, Redux, Redux-Saga, Typescript, Cypress, Cucumber, RTL, Jest, ChartJS, Material-UI, JEE, Groovy, Spring Boot 2.x, Spring Data, Spring Security, Spring Rest, Oauth2, IntelliJ IDE, Tomcat, Git, Flyway, Spock, WebClient, Hibernate, MySQL, Git, Docker, AWS, S3, DynamoDB, Gradle, Sendgrid, Slack integration, Flyway, Handlebar, Google Script

## Desjardins GRP et Orchestrateur FSDF

Senior Software Engineer January 2019 – January 2020

As part of this mandate, he takes part in the design, architecture and development of RESTful applications (Spring ReST, micro services) with the SPA part (React, Angular) that make up the loan recovery management platform

- Design/program new web REST Json APIs
- · Design UI visual components

Environment: React 16.x, Redux, Axios, TypeScript, Angular 8, @ngrx/store, Twitter Bootstrap, RxJS, JEE, Kotlin, Spring Boot 2.x, Spring Data, Spring Security, Spring Rest, Oauth2, IntelliJ IDE, Tomcat, Git, Flyway, jUnit 5, Maven, Pivotal Cloud Foundry, Concourse, Apache POI, Open PDF, H2, Hateoas, Git, BitBucket, Métho Agile, Swagger, Scrums, Jira

## ActiVia Networks Digital Menu Board

Senior Software Engineer October 2017 – October 2018

As part of this mandate, he takes part in the development of RESTful applications (Spring ReST) that make up the platform for managing the menus displayed in shops and restaurants.

- Design/program new web REST Json APIs
- Design UI visual components

Environment: GWT, TypeScript, Angular 5.x, Twitter Bootstrap, RxJS, JEE, Spring 4.x, Spring Boot, Oauth2, IntelliJ IDE, Tomcat, Git, Liquibase, HTML5, CSS3, Servlet-API, jUnit, Easy-Mock, Maven, Team City, Méthodologie Agile, Scrums, Jira

## ACCEO Solutions Inc. Transphere platform

Team Lead & Senior Software Engineer October 2013 – October 2017

In this Web-based project, Mr. Masson acted as the team lead and as a senior software engineer. Main activities include debugging, developing and design new features for a Spring + Jersey REST application. Agile context, Jira and Maven/Jenkins tools

- Team leader
- Desing/program new web REST Json APIs requested by product owner

Environment: TypeScript, Angular 4.x, RxJS, JEE, Spring IoC, Oauth2, Eclipse, Tomcat, SVN, JavaScript/jQuery, HTML5, CSS3, Servlet-API, Velocity, jUnit, Mockito, MyBatys, Maven, Jenkins, SoapUI, Apache CXF, JAXB 2.x, Agile Methodology, Scrums, Jira

## Fédération des Caisses Desjardins du Québec Acquisitions de Fonds en ligne

Team lead, Senior Software Engineer February 2011 – November 2013

Design and develop a solution allowing department to develop independently from AccesD application. Traditionnally all applications have to be developed inside AccesD which is now too big and involve high development costs.

- Analyse and propose a solution to decouple department development from main AccesD application. The solution involve a new paradigm: Remote HTML5 Fragment which is simply based on HTTP protocol;
- Proof of concept between AccesD and a classic JEE remote application deployed on a simple Tomcat server;
- Design the generic struts action inside AccesD and the Servlet Filter on the remote application side;
- Design and develop Spring MVC 3 remote application

Environment: JEE, SOA, Apache Camel, JAX-WS, CXF, Spring-WS, Maven, WebLogic, SunOne-iPlanet, WebSphere Tomcat, Jetty, Eclipse, CSV, JavaScript, DOM, DHTML, CSS3, Servlet-API, Spring MVC, Velocity, Méthodologie Agile, Scrums, jQuery, Twitter Bootstrap, PIE.htc, jUnit, Mockito, JPA2, Hibernate, Agile methodology, Scrums, Jira

#### Hydro Québec

Senior Software Engineer

#### Diag Intranet Application

April 2009 - January 2011

In this Web-based project, Mr. Masson acted as a senior software programmer debugging, developing and design new features for an intranet Struts 1.x application. Agile context, Jira and Rally tools.

- Fix bugs and crash of existing application
- Desing/program new features requested by clients
- Design and implement a Tag Library for rendering Excel as HTML5/Ajax for edition inside browser

Environment: JEE Server, Oracle Database, Struts 1.x, jBoss, LDAP Security, Eclipse, Subversion, Ant, Spring, Subversion (SVN), Apache POI, JSP, JSTL, TLD, jUnit, Mockito, JavaScript, XML, CSS3, jQuery.

## Caisse de dépôt et de placement du Québec Refonte Data1

Senior Software Engineer May 2008 – Mars 2009 (11 months)

In this Web-based project, Mr. Masson acted as a senior software programmer developing a web integration console and a Windows Concole for multiple existing in-house tools.

- Design and implementation of the squeleton of the web console through Struts 2
- Design and implementation of the squeleton of the Windows console through C# .NET
- Implement the data files collect module
- Design and implement technologies for Excel integration with existing Unix backend through VBA and Automated SSH Sesisons

Environment: C# .NET for client components, Microsoft SQL Server, JEE Application Server, Struts 2, Tomcat, Acegi Security with LDAP, Eclipse, CVS, Ant, Spring Framework, iBatis, JSP, Tiles, JSTL, TLD (Tag Libraries Definition), JavaScript, DOM, XML, DOM4J, CSS3, MySQL, jUnit, Mockito, TestNG.

# Axa Assurances Online Insurance Quotes and Policies

Senior Software Engineer July 2006 – June 2008 – 20 months

In this Web-based project, Mr. Masson was a programmer analyst developing the client & policy search module, the automobile insurance coverage screen and the automated renewal process. Specific tasks included:

- Program Proxy, JSP, JSTL, TLD for the client & policy search screen
- Implement Proxy, JSP, JSTL, TLD for the insurance coverage screen module
- Design and Implement services methods for automated renewal process for automobile policies

Environment: jBoss, BPEL, ESB ServiceMix, Maven, Eclipse, Subversion, Ant, Spring, Hibernate, iBatis, Quartz, JSP, JSTL, TLD (Tag Libraries Definition), JavaScript, DOM, XML, XHTML, CSS3, AS400, DB2, Agile Methodology, Scrums