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Independent Software Engineer

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Objectives

current Independent Software Engineer with extensive experience designing mobile applications and libraries in Java, Objective-C, C and C++.

target:short-term Improve core development knowledge (API design, etc) and team/project management skills (planning, communication). Use the right technologies (on iOS/Android) along with relevant best practices (Agile, Design Patterns) while working on technically challenging projects as well as interesting business ventures (startup and alike).

Work Experience

June 2015 – Present **Software Engineer / Software Contractor**, *IO Stark*, Taiwan.

Software Engineer

Developing a 2D video game for mobile platforms

Software Contractor

Homido.com - Ported Homido VR Player iOS app to Android

Sept 2014 – June 2015 **R&D Manager / Software Architect**, *Toro Ltd*, Taiwan.

Software Architect

Co-selected languages/frameworks/tools (C++11, Python, Volley, Boost C++, CMake, ...), designed/evaluated API Architectures, set coding standards (code reviews, coding style, unit testing standards, ...).

R&D Manager on 1 R&D software project (4+ engineers)

Supervised 4+ engineers directly on new flagship product for the company for Android/iOS.

Technical Recruiter

Screened 10+ engineering resumes. Interviewed 5 engineering candidates. Hired 1 Android UI/UX engineer. Scrum master.

Jun 2013 – Sept 2014 **R&D Manager and Lead Android Software Engineer**, *Toro Ltd*, Taiwan.

Lead Android/J2SE Software Engineer on J2ME Device Emulator (*MicroEmulator*)

Simplified JSR118/257/120 event handling. Co-added native Android application behaviour to J2ME Device Emulator keeping JSR118 compatibility. Specified LocalPush API for MIDlet. Specified Push Notification API for MIDlet and implemented for Android platform.

R&D Manager on 4+ R&D software projects (10+ engineers)

Android/J2SE Microemulator: Major refactoring to support new features for the company's flagship product: **Valyou Wallet**.

Windows Phone 8 Microemulator: Porting J2ME Device Emulator Microemulator to Windows Phone.

Unit Testing infrastructure: Unit test execution and reporting automation used by 20+ engineers for Android/Windows Phone platforms. Reduced writing unit test cost and regression bugs by about 50% across 2 platforms.

Translation tool to speed up exporting Wallet space APIs to SDK space.

Technical Recruiter

Screened 30+ engineering resumes. Interviewed 8 engineering candidates. Hired 2 engineers. Scrum master, task assignment, roadmap planning, team building and company policy writing.

Oct 2012 – **Lead Android Software Engineer, Toro Ltd, Taiwan.**

May 2013 Ported **T-mobile™ NFC Mobile Wallet** to Android platform (using J2ME Device Emulator). Introduced CI (Jenkins, Release scripts) for all commercial releases, reduced humans interaction/errors and promoted project/ticketing software (JIRA) within Mobile Department.

Jun 2012 – **Senior Android Software Engineer, Toro Ltd, Taiwan.**

Sept 2012 Implemented "**Fin@Net**" **mobile payment** prototype enabling offline payment between a MIFARE Desfire EV1 card and an Android mobile device acting as Point Of Sale (POS): card balance, topup and debit features.

Led (guidance and technical solutions) 1 UI/UX engineer and 1 Backend engineer

Liaised with 3rd party Tech Leads to ensure expected outcomes, specifications were understood.

Iterated fast over new requirements specified throughout the project.

May 2011 – **Android Software Engineer, Toro Ltd, Taiwan.**

May 2012

J2ME Device Emulator for Android platform

Added support for JSR-257(full), JSR-117(SIM-SE subset via **SIM Alliance Open Mobile library**), JSR226 with Tech Lead (parser/render only), runtime images selection based on screen resolution keeping JSR118 compatibility. Wrote J2ME Device Emulator (Android) build system (platform independent, config file based instead of script tweaking): reduced build/setup cost from days to hours on **T-Mobile wallet** and **PayezMobile** projects. Simplified codebase maintenance: single codebase instead of a codebase per customer. Codebase refactoring, bugs fixing before adding new features (whenever possible).

Port J2ME "PayezMobile" payment application to Android and Blackberry

Communicated with **Gemalto** and **Credit Mutuel, CIC** banks about requirements, release planning, software delivery, bug fixing. Fixed major security hole in payment flow. Converted touch screen solution to fit non Blackberry devices. Fully automated build process (compilation and signatures) for all 16(Blackberry)/8(Android) releases flavours.

Implemented UI for Tapp8 POC (in Java J2ME). Tapp8 enables mobile payment for Taiwan taxis. Implemented in J2EE Client & server for Carrefour Demo POC.

Oct 2010 – **Junior Web Software Engineer, NCR Corporation, UK.**

April 2011 Improved mobi-web™ 's web scrapping (Javascript/JQuery), UI components, device capabilities detection (JS, CSS, Cookie support) technologies to deliver mobile optimised websites for feature phones and smartphones. Used: Spring Web Flow, JSP, HTML, CSS. Trained offshore team to develop mobi-web™ enabled mobile websites (lectures and practicals). Scrum attendee.

Sept 2010 – **Junior Web Software Engineer, Mobiqa Ltd (NCR acquisition), UK.**

Oct 2010 Added UI and settings improvements (request headers/user prefs) on iPhone Test Harness app to test mobi-pass™ platform. Implemented Flight Status and Flight Booking features for Ryanair's mobile version using mobi-web™ and Spring Web Flow (flow), JSP, XHTML and CSS (UI) and Canoo Web Test (Unit test). Scrum attendee.

- Jan 2010 – **Junior Software Developer/Tester/Sys Admin**, *Infographics UK Ltd*, UK.
 Sept 2010 Enhanced company's issue ticketing software (Asp.Net 3.5) to customer/internal demands. Refactored database (Transac-SQL). Implemented (Powershell 2.0) Hyper-V virtual machines backup script. Managed Active Directory/Exchange users and computer resources. Ensured 99% servers availability. Beta tested FloSuite products and customer issues.
- Apr 2007 – **Software Developer Intern**, *TIMA Research Laboratory (CNRS/INPG/UJF)*, France.
 Aug 2007 Designed (UML 2.0), implemented (Java 1.5) tool to help researchers evaluate experimental CMOS sensors performance.
- May 2006 – **Software Developer Intern**, *General Hospital IT Dpt (CHU)*, France, Grenoble.
 Jun 2006 Co-analysed (UML 1.0), co-designed and co-implemented wizard (VB.Net/XML) to generate database schema information. Planning meeting with the Lead developer and report progress.

Education

- 2008-2009 **MSc, Computer Science and Software Engineering**, *The University of Edinburgh*, Edinburgh, Scotland.
MSc Project : Gather Real-time information about a ball throw using experimental inertial motion capture technology devices called Specknet. Team Project : Co-Implemented (5 students) in Java a virtual reality ball throwing game using Specknet devices. Implemented in C++ marching cube algorithm to display voxels Isosurface. Implemented in C++ skin deformation algorithm while bending an arm. Designed efficient algorithms for theoretical parallel architectures. Implemented in C/MPI API algorithm to sort a sequence of numbers in a computer cluster.
- 2007-2008 **BSc, Computer Science**, *Edinburgh Napier University*, Edinburgh, Scotland.
- 2006-2007 **Licence in Information Systems**, *Pierre Mendès-France University*, Grenoble, France.
- 2004-2006 **HND in Computer Science and Software Engineering (DUT)**, *Pierre Mendès-France University*, Grenoble, France.
- 2001-2004 **A Level in Scientific Sciences (Bac S)**, *Marlioz College*, Aix-les-Bains, France.

Technical Experience

Proficient With

- languages Java, C, Objective-C 2.0
 tech iOS SDK 4.0+, Android SDK r11+, JSR118, JSR226, JSR257, JSR177, Junit, JDK6+
 tools Git, Mercurial, Vim, Xcode, Netbeans, Maven, Ant, OSX, Debian based dists

Experienced With

- languages C++, Bash Scripting, Python, L^AT_EX, Assembly 68K, AppleScript, Swift 2.0
 tech OpenGL ES, SenTestKit, Boost.Test, JSR139, ISO-7816-4, MIFARE Desfire
 tools Javadoc, Doxygen, Hudson/Jenkins CI, UML 1.0/2.0, Svn

Influenced by

- books [The Pragmatic Programmer](#), [Effective Java](#)
 designs [Linux kernel](#), [Design Patterns](#)

FOSS (selected) - available on Github

- 2015-Current [awesome-cpp-mobile](#).
 Curated list of build scripts to compile C/C++ libs for iOS/Android
- 2013-Current [libegl: Khronos EGL 1.4 for iOS](#).
 EGL is an interface between Khronos rendering APIs (i.e OpenGL ES) and the underlying native platform windowing system (iOS). Written in C99/Objective-C 2.0
- 2013-Current [boostoniphone-generic](#).
 Helper script to cross compile Boost C++ as fat static library (i386/armv6/armv7) for iOS.

- 2013 **loggingapi-core-lib**.
Cross-platform logging lib in C++98 with loggers, sinks, and formatters.
- 2013 **settingsapi-core-lib**.
Cross-platform conf file lib with JSON backend in C++98.

Honors

First class Napier University, BSc Computer Science

Languages

French **Native** English **Fluent** Mandarin Chinese **Beginner**

Certifications

Coursera **Learning How To Learn**

Interests

Handball France: (National Young Hopeful) - Competition: 7 years. 3rd runner-up team 2006/2007 French National Championship. Taiwan: National Taiwan University: 2 years

Swimming France: (Regional level) - Competition: 5 years - 12th best team in 2001/2002 French National Championship.

Personal Development Lafay method and HIT, Productivity using Pareto Law, Lifestyle design, Seduction, Value Investing

Recommandations

Available upon requests