|  |  |  |  |
| --- | --- | --- | --- |
| **Vincent FIACK**  5 chemin du Koepfel  67700 SAVERNE, FRANCE  +33 6.41.93.05.28   vfiack@gmail.com | **Head of Software Development** | | |
| I'm a hands-on Head of Software Development at Nanalysis, a leading manufacturer of advanced scientific instruments (NMR & MRI). Leading the software development behind the High-field NMR industry's first viable alternative, I take pride in optimizing project timelines, standardizing development methods, and fostering outstanding team retention and customer satisfaction. | | | |
| **Leadership & Management**   * Distributed team management, hybrid remote/on-site collaboration * Project management and resource allocation * Agile methodologies: Kanban, Scrum   **Software development**   * Software strategy formulation and execution * Software architecture * Quality management (ISO-9001) and code review | | **Process & Tools**   * Agile project tracking with Jira * Git and Subversion for versioning * CI/CD with Jenkins and GitHub actions   **Technical skills**   * Service-based architecture, REST APIs, Message queues, … * Languages: Java, C, Python, Rust, JavaScript, TypeScript, … * Databases: MySQL, Postgres, Oracle, SQLite | |
|  | | |  |
| **RS²D / Nanalysis: Head of Software Development** | | | **2020 - …** |
| **Led a distributed software development team of 15 people across France and Canada, overseeing multiple specialized teams:**  Core: Developed backend libraries and desktop applications.  Embedded: Developed firmware for MRI and spectroscopy devices.  Scientific Development / Signal Processing: Applied cutting-edge algorithms for MRI & NMR applications.  **Spearheaded the software development and successful market introduction of the NMR industry's first viable alternative product, disrupting a previously monopolistic market.**   * Aligned software strategy with business objectives, optimizing project delivery timelines and team productivity. * Standardized development methods and product release lifecycle company-wide, ensuring code quality, on-time deliveries, and maintaining ISO-9001 certification. * Nurtured team talent through effective people management, achieving 100% team retention. * Received increasingly positive customer feedback, reflecting high levels of customer satisfaction. * Actively participated in all aspects of software development, providing hands-on contributions to new features and regular code reviews to foster a collaborative development culture.   *Technologies: Java, Swing, JavaFX, Quarkus, Python, C, Rust* | | | |
| **GE Healthcare: Senior Developer** | | | **2019 - 2020** |
| Member of the “interoperability” team for a dose tracking solution:   * Maintained and improved the data ingestion platform, ensuring seamless integration with medical equipment from multiple manufacturers, streamlining data acquisition and analysis. * Developed a PACS (medical image archive) indexing tool, leading to faster integration of customer systems. * Conducted code reviews and implemented quality improvements within a SCRUM-based team, ensuring compliance for medical device software (ISO-13485).   *Technologies: Java, J2EE, Spring Boot, JMS, DICOM, MySQL, MariaDB, React, TypeScript* | | | |
| **RS²D: Software Engineering Manager** | | | **2016 - 2019** |
| **Software Team Management and Cross-Functional Collaboration**   * Led and managed a highly efficient software development team of 3, fostering a collaborative environment and delivering successful projects. * Coached MRI and hardware engineers, enhancing their programming skills for improved software, firmware and pulse sequence compatibility, leading to enhanced system reliability. * Setup and training for versioning, continuous integration, ticket tracking and quality management tools * Established effective development methods, selecting features, objectives and priorities to align with business goals and deadlines. * Defined and implemented the software quality process, establishing and monitoring key indicators. Obtained ISO-9001 certification. | | | |
| **Maintenance and improvement of the software suite (Imaging, spectroscopy and development tools)**   * Enhanced software quality, maintainability, and performance by conducting a comprehensive code base clean-up and streamlining internal architecture for increased system robustness. * Developed advanced data acquisition, storage, visualization, and analysis tools, enabling efficient scientific usage and improved user experiences. * Designed a robust Sequence and Plugin development API, enabling customizable functionality for third parties. * Revamped the graphical user interface, optimizing usability and customer satisfaction.   *Technologies: Java, Swing, SQLite, JAXB, Javassist (byte code manipulation), JGit* | | | |
| **Embedded development on MRI and NMR systems**   * Successfully interfaced FPGA and embedded software, enabling seamless communication between hardware and software components. * Implemented hardware control, monitoring, and networking aspects of MRI and NMR systems, ensuring stable and reliable operation.   *Technologies: C, Python, µC/OSII, embedded Linux, Arduino, Raspberry* | | | |
| **CRIH Alsace (Strasbourg Hospital): Information System Architecture / Software Engineering** | | | **2002 - 2016** |
| Development and implementation of ECG dematerialization   * DICOM ECG Viewer * Worklist server interfaced with multiple data sources * Related DICOM tools: query/retrieve to WADO proxy, filtering store proxy, ...   *Technologies: Java, Swing, DICOM, Dcm4che, ORM HL7, HAPI* | | | 2013 - 2015 |
| Intranet portal redesign and modernization  *Technologies: Java, JSP (Tomcat), Citrix* | | | 2007 - 2015 |
| Design and implementation of an authentication server  *Technologies: Java, Hibernate, Jetty, JSON, Web Services (XFire), HAProxy* | | | 2008 – 2012 |
| Development of a “shared workstation” on thin clients  *Technologies: C, smartcard & PCSC, Linux* | | | 2006 – 2009 |
| Creation of a collaborative portal application  *Technologies: Web, Python, Zope, Nuxeo CPS (collaborative portal server)* | | | 2004 – 2005 |
| Development of a Mantis to Java/JSP converter  *Technologies: Java, Applets, JSP, HTML, CSS, JavaScript, SQL (Oracle)* | | | 2003 |
| **Coélis: Developer** | | | **2001** |
| Development of a meta-search engine for patents  *Technologies: HTTP, Python, MySQL, PHP* | | |  |

|  |  |
| --- | --- |
| **Personal projects and opensource contributions** | |
| **Blocks Language: Lead developer**  Design of a visual programming language for the Java platform  *Technologies: Java (Swing, Xstream, JSR 223, ...)* | **2007** |
| **Lucane Groupware: Maintainer, architect, lead developer**  **Nominated for the 2005 “trophées du libre”, more than 50.000 downloads**  Full development of an open source groupware   * Central platform on which the applications are built * Peer-to-peer, “object-oriented” network protocol * Synchronous and real-time applications: instant messaging, file sharing, forum, calendar, task list, personal notes, shared drawing, mail client, RSS reader, voice chat, ... * Public relations, project management, documentation, seminars...   *Technologies: Java (network, Swing, JSP, i18n, serialization), databases (HSQLdb, Mysql, Postgres, LDAP), web* | **2002 - 2006** |
| **Other contributions**   * QixBall: arcade game for Android (2018) * Xemelios: authentication modularization, architecture advices (2006) * TinyMCE: plugin development, bug fixes (2005) * Nuxeo CPS: Contributor, quota management and authentication modules (2004-2005) * Ruby: Sharp Zaurus port (2002) | **2002 - 2019** |

|  |  |
| --- | --- |
| **Education** | |
| 2001-2002: *Licence professionnelle* “Designer/developper in distributed environments”, IUT Illkirch  B. Sc in Computer Science. |  |
| 1999-2001: IUT Informatique, Illkirch  Equivalent to an Associate’s degree in Computer Science. |  |

|  |  |
| --- | --- |
| **Miscellaneous** | |
| French: native speaker  English: fluent, daily professionally use, 910 points on the TOEIC test in 2002.  Personal interests: Beekeeping, music (violin), go, sport (cycling – road racing). |  |