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| **Vincent FIACK**5 chemin du Koepfel67700 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
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| **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.
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| **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*  |  |

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| **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** |

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| **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. |  |

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