Curriculum Vitae

PERSONALIA

Name	M. Bakker
Call sign	Michael
Residence	Baarn
Date of birth	2 march 1986
Position(s)	Software Architect / Senior Developer/ Software Engineer
Date of last change	2 november 2021

PERSONAL PROFILE

A driven all-round IT professional with a deep sting in engineering brings two decades of hands-on experience in operational and architectural issues from a broad perspective creative input. Comfortable with different programming languages, databases and all kinds of (modern) frameworks. I design and realize software solutions in addition to automotive and education mainly in the finance sector. I was inspired by MDD (model-driven development) in combination with low-code cloud solutions to automate and adapt complex business processes in simplified user interfaces by domain experts via a DSL. Effective communication skills combined with responsibility and understanding. Gladly working in a team with passionate experts at different levels and levels to realize beautiful software. I am creative, communicate directly and honestly with a sharp edge if necessary. Inspirational input is recruited in alternating challenges in both professional and non-professional fields.

Through a long-term affinity in (self-learning) algorithms and extracting the potential added practical value therein, I realized a wide range of domains in a spectrum from image recognition of shopping offers to a wordfeud solver software solution. For example, a rummikub solver, IQ test generator and a bitcoin price predictor. As a Javanese from leaving my drafts career at Dutch top level, I work on A.I. for zero-sum games on equivalent level, in which I experiment and develop with the most prominent frameworks and run alternatives architectural paths through which I enjoy development challenges with multiple perspectives

CAREER

Employer	Position(s)	Period
Ventus	Managing Software Architect / Senior Software Engineer	11 2021 - now
GiftLee	Co - Founder	08 2021 - now
Appmodel	Founder / Sr. Java & Node(JS) Engineer	02 2021 - now
Iddink	Sr. Java Engineer	05 2020 – 09 2020
BMW Group	Solution Architect / Sr. Java & Node(JS) Engineer	06 2019 – 05 2020
Topicus in Finance - LME	Product Owner/ Solution Architect/ Sr. Java & Node engineer	02 2017 – 06 2019
Topicus in Finance - FF	Tech lead, Sr. Java Engineer, DevOps Engineer	01 2015 – 11 2017
Topicus in Finance – Package Deal	Tech lead, Sr. Java Engineer/ Solution architect	02 2014 – 01 2015
FINAN B.V. – SBR	Software Engineer	03 2012 – 02 2014
Self-employed in the construction industry	Java Engineer	01 2004 – 03 2012

GENERAL EDUCATION

Education	Period	Certificate
HBO Software Engineering/ HvA	2013	Y
HBO propedeuse Mechanical Engineering/ HvA	2013	Y
Havo/vwo** Nature & Technology/ Het Baarnsch Lyceum	2003	Y

PROFESSIONAL EDUCATION & TRAINING

Education/training	Period	Certificate
Oracle Java OCA , Oracle	2016	Y
Influencing and convincing effectively	2014	

EXPERIENCES PAST 17 YEARS

Position: Founder / Sr. Java & Node(JS) Engineer
Client: Appmodel
Period: 02 2021 - heden
Methods & Tools: *PostgreSQL/PL-SQL, NLP, Quarkus, Hibernate, Docker, Node(JS), MySQL, Java JDK 16, Infinispan, JRebel, MediaWIki Action API, C, JSONB, React, SEO, full-text-search, GIN, CTE, Regex, RESTEasy JAX-RS, HTTP(S)2, Panache, SmallRye, lombok, Let's Encrypt, Tekst Blocks, Pattern Matching, GraalVM*

Building *AppModel* technically brings, among other things, *NLP,* by introducing Netflix-like machine learning suggestive functionality to another industry in combination with unique self-learned descriptions, generated from existing sources, the technique provides effective SEO. Quarkus offers Java minimalistic microservice capabilities and GraalVM on its NodeJS integrations. Through records and default interfaces, the code becomes more readable and easier to maintain. Lombok shrinks the code base by disguising standard verbosity in annotations. The code base looks like the same shapes to be taken as the compact Node(JS) code but keeps the simplicity in maintenance and readability and the performance is sublime. Text Blocks ensure that complex SQL queries have also become maintainable in Java. Using current networks and interfaces, the software is kept up-to-date by daily synchronizing Quartz jobs.

Position: Sr. Java Engineer
Client: Iddink – Team Amstel
Periode: 05 2020 – 09 2020
Methods & Tools: *Wicket, JRebel, Hibernate, Apache, Maven, Jenkins, Agile, Wildfly, SQL Server, Atlassian stack*

Worked as an engineer in team Amstel on a large monolithic application in biweekly sprints. In addition to developing features and solving bugs, I have implemented JRebel in the daily work in terms of process optimization. This eliminates lengthy rebuild times and creates a creative playing field for the developer. In addition to integrating JRebel, I made the work environment suitable for windows developers and ensured that the stack can be built and deployed from the IDE so that the engineer's work experience is optimized

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Position: Solution Architect / Sr. Java & Node(JS) Engineer
Client: BMW Group
Period: 06 2019 – 05 2020
Methods & Tools: z/OS, DB2, Angular, Payara, Siteminder, Apigee, ForgeRock, OAUTH2, API-First, Talend, OpenShift, Jenkins, CNAP, OpenAPI, Swagger, JAAS, SAML, NodeJS, ECMA, TS, Java EE, Agile, SQL, Atlassian, Hibernate, IBM-MQ, Maven, Nexus, Apache, BRI, International

As a solution architect I conducted research into a possible modernization within the international organization to current architecture to achieve a future-proof landscape that enjoys modern advantages. For example, there is a link made in the existing infrastructure to connect the mainframe and the Oracle/PL/SQL with Apex pillar with new ecosystems to open doors for an API manager and connect international components according to contemporary security standards. Getting to know the stakeholders within BMW as an innovation manager to find the right people to shape the change, so for example found a COBOL programmer with Angular ambition and Oracle/Apex developers to connect with the new ecosystem. Contribution as engineer in the scrum team delivered to the realization of the source code for an international collaborative project that has provided foundation for the research. As a result, a cloud native OpenShift environment with the associated build pipeline has been rolled out that serves as an OTAP basis for future modern projects within the Dutch BMW IT landscape and connects to the existing infrastructure. My knowledge has been transferred to a full-stack engineer with a specialization in Angular, who will care contribute to further automation of the business processes with the acquired possibilities according to the strategic guidelines

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Position: Product Owner/ Solution Architect/ Sr. Java & Node(JS) engineer
Client: Topicus in Finance - LME
Period: 11 2017 – 06 2019
Methods & Tools: Elastic stack, NGinX, Docker, JOSE, JWT, DSL, Angularjs, Angular 2, Vue, Node(JS), Linux, CI/CD, JBehave, Traefik, FFL, Swagger, OAUTH2, Redux, RethinkDB, Git, Webpack, NPM, Pub/Sub, HTTP(S), DNS, MDD (model-driven development), Prototype-Based programming, SOLID, TDD, BDD, Atlassian Stack, NativeScript

Designing and realizing a *PaaS* environment where business analysts and software developers work together on financial models within the organization by means of a *DSL* (technology for data communication) via an *MDD* approach. The portal empowered the econometrician with a stripped-down declarative programming language designed tailored fit for the domain. The cloud solution bridges the gap by offering advanced IT solutions in a simplified manner in the portal and allowing them to flow into existing architectures. The project arose as a result of the presentation of the idea and Proof of Concept to the CTO. I then defended the project before the Management Team and demonstrated the added value of *MDD* as a cloud solution within the organization. The containerized architecture is orchestrated in a Rancher environment and accessed with a Traefik gateway proxy to be able to roll out the landscape in a versioned way. In collaboration with *UX* designers and business analysts, we have set up an Angular front end that meets the specific needs of the business analysts. The *CI/CD* and *OTAP* pipeline is accessed via the portal so that the business analyst can perform interest rate changes and release procedures using the graphical interface. From a technical point of view, *NodeJS* was chosen to facilitate the deployment in both back and front-end. A prototype has been made for a mobile lead to unlock the current architecture via NativeScript. The single-threaded architecture of *NodeJS* provides a fast response time and, in addition to performance, also solves scaling issues by allowing the calculations in both the front and backend. During the design of the data tier, *RethinkDB* was chosen on a wafer-thin service layer that can stream clusterable feeds. The instances and definitions of the models are stored here with which a near real-time experience can be created. For the definitions of the models, an integration has also been made for *Git*, to create interfaces with the current architecture. Products developed respectively in chronological order with the project: - A tool for viewing the monthly payments of a mortgage;
- Risk analysis for the provision of business loans for the major banks;
- Tool for calculating the cost of a child from birth to study.

Position: Tech lead, Sr. Java Engineer, DevOps Engineer
Client: Topicus in Finance - FINAN Financials (FF)
Period: 01 2015 – 11 2017
Methods & Tools: SOLID, Java EE6, WSDL, REST, Ant, Maven, EJB, Tomcat, Wildfly, Hibernate, SOAP, SOA, Oracle DB, JSP, Mockito, JUnit, PowerMock, Selenium, SoapUI, Angular (JS), JBehave, Arquillian, Liquibase, Selenium cluster grid, JTA, Spring, JNDI, JPA, CDI, CMT, AOP, Scrum, Kanban, Extreme Programming, Atlassian Stack, Wicket.

Designing and realizing a PaaS environment where business analysts and software developers use a DSL (data communication technology) working with each other through an MDD approach to financial models within the organization. The portal empowered the econometrician with a stripped-down declarative programming language that is tailored fit designed for the domain. The cloud solution bridges the gap through advanced IT solutions simplified in the portal and lets it flow into existing architectures. The project arose as a result of the presentation of the idea and Proof of Concept to the CTO. Then I got it defended for the Management Team and the added value of MDD as a cloud solution within the organization demonstrated.
The containerized architecture is orchestrated in a Rancher environment and accessed with a Traefik gateway proxy to be able to roll out the landscape. In collaboration with UX designers and business analysts, we have developed an Angular front end that meets the specific needs of the business analysts. The CI/CD and OTAP pipeline is made accessible via the portal so that the graphical interface can be used for, among other things, interest rate changes and release procedures by the business analyst himself.
From a technical point of view, NodeJS was chosen to facilitate the deployment in both back and front-end. For a mobile lead there is made a prototype to unlock the current architecture via NativeScript. The single-threaded architecture of NodeJS provides a fast response time and, in addition to performance, also solves scaling issues through the calculations both in the front and the backend. When designing the data tier, RethinkDB was chosen on a wafer-thin service layer that can stream clusterable feeds. The instances and definitions of the models are stored here, enabling near real-time experience can be created. An integration has also been made for the definitions of the models for Git, to work with the current architecture interfaces to create.

Products developed respectively in chronological order with the project:
- A tool for viewing the monthly payments of a mortgage;
- Risk analysis for the provision of business loans for the major banks;
- Tool for calculating the cost of a child from birth to study

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Position: Tech lead, Sr. Java Engineer/ Solution architect
Client: Topicus in Finance – Package Deal

Period: 02 2014 – 01 2015
Methods & Tools: SOLID, OO, OOA, CXF, Wicket, JS, Java EE6, UML, Git, Jetty, Mockito, SOAP, JAX-RS, Quartz, Hibernate, AOP, FFL, Criteria Query, JTA, JPA, (My)SQL, PubSub, A(Synchronous), TDD, BDD, eXtreme Programming, Atlassian Stack, Sonar

Rebuilding the financial core of the organization. As a Tech lead, in collaboration with MT, made the decisions regarding the rebuilding of the core software on a solid OO basis according to the SOLID principles. In addition to the investigative role, the responsibility for the realizing the product with a relatively large scrum team. This is how I laid the foundation for the application architecture and contributed best working methods within the updated guidelines. By, among other things, deploying and transferring the knowledge of the design choices, the product is ready for wider use across customer teams. Made countless PoCs as an engineer, defended and deployed to reduce complexity and increase flexibility so that maintainability remained stable.I wrote TOs to ensure the coherence and links between software components that needed the most urgency to simplify. Examined the client-server communication for optimization purposes and made upgrades to the data tier for example by rewriting SQL and Criteria Queries or adjusting the domain model.
I also took part in job interviews to test technical skills.

Position: Software Engineer
Client: FINAN B.V. – SBR
Period: 03 2012 – 02 2014
Methods & Tools: SOLID, Wicket, Java EE (5/6), FIN, JavaScript, Agile, Scrum, SQL, SVN, Hibernate, SSH, Maven, Nexus, JAX-WS, SOAP, Selenium, JBehave, POI, SOLID, MySQL, JPA

Worked as an engineer in an Agile environment. The Scrum team was focused on meeting the customer requirements of a major bank operate. In addition, I attended evening school to obtain my bachelor's degree. I was mainly working on structure in the codebase spread across several SVN repositories. Wicket and JSP to the presentation layer, for a generic questionnaire generator. In the middle layer I worked on the implementations of Hibernate and JPA. By the way I worked FOs to TOs to realize JAX -WS/RS endpoints and map the domain architecture. The code quality monitoring by reviewing colleagues' code and writing JUnit tests with Mockito.
Due to a decades-long autodicate learning path, I was already able to devise an architecture of the SBR-Direct platform in q3-4. Through By means of a proprietary workflow system on top of Visio, the complex application processes are clear
and managed by the domain specialists.

Position: Java Engineer
Client: Self-employed in the construction industry
Period: 01 2004 – 03 2012
Methods & Tools: Java (SE), Hibernate, Spring, JPA, GWT, GPS, Swing, HTML, CSS, Postgres, mIRC, Android, Cross Mobile

As a successful and proud owner of a company, I created an invoicing program with Java Spring in combination with GWT (Google's open-source Java framework), and GPS tracking software on the mobile with the Googleapis to update my calendar automatically and automate the billing process. As an entrepreneur I took care of my own acquisition to promote and sell my services.

Prior to the latter date in mIRC script automation software for rigging clan websites and created invoicing software for the entrepreneurial family, which is still used today by family members to simplify billing.
* In addition to engineering, I was also hired to optimize the development processes.
** the science subjects at pre-university level, the alpha at havo. I grew up in an entrepreneurial family. Studying was an unknown path within the trusted circles, so the follow-up to the study has slowed down for a number of years.
*** The HBO program was initiated with mechanical engineering, while obtaining the propaedeutic certificate against cum laude an IT course turned out to be a eye-opener, which combines the second year of IT with the first year of IT and also with a cum-laude gradation in duration has been straightened.

KNOWLEDGE OVERVIEW

This is a selection of my development skills, conducted research in R&D and applied frameworks to: prototyping solutions. In addition, often the countless versions of less significant parts and hundreds of libraries omitted to keep the overview.

Methods and standards

Agile Kanban/ Scrum/ LEAN/ XP
API-First e.d. ontwikkelstrategieën
DDD/ TDD/ BDD e.d. development strategieën
DSL/ MDA e.d. domain strategieën
ITIL

Specialties

Technisch ontwerpen/ UML/ Software Design patterns/ Use Cases/ OO/
MVC/ SOLID/ OOAD/ OOD/ e.d.
Unit/ Integratie/Regressie e.d. Testen methodieken

Industry knowledge

Financiële dienstverlening
Automotive
Bouw en Installatie

Languages

Nederlands	native language
Engels	good

Software

Git(hub)/ Subversion/Cloud9 e.d. version control systems
Atlassian stack; JIRA, Confluence, Stash, SourceTree e.d. collaboration tooling
Spring/ JSF/ Wicket e.d. MVC- raamwerken
VMWare
Selenium (Cluster)/ Sonar/ Arquillian/ JBehave/ Mocha e.d. testraamwerken
PL/SQL Developer/ Oracle SQL Developer/ MySQL Workbench
Powershell scripting
Virtualization/ Hyper-V

Operating systems

Linux/ CentOS/ Debian/ Ubuntu
MS Server/ WSL/ Visio/ Telnet/ ODB

Development

SQL(lite)/ PL/SQL-(lite)
Java/ Node(JS)/ JavaScript/ TypeScript/ Bash
Declarative & Reactive programming/ Low-Code
Spring Web e.d. MVC-raamwerken
Visual Basic
mIRC Script
OpenShift/Apigee/ForgeRock/CNAP
Webservices (o.a. Axis, JAX-RS, RESTEasy)
SOAP/ WSDL/ XSD e.d. endpoint protocollen
JEE security/ SAML/ OAUTH/ JOSE/ JWT/ passport
HTTP(1|2)(S)/ TLS/ DNS/ SSH/
XSLT/ XPath/ AST e.d. functionele talen
Liquibase e.d. db-migrate systemen
HTML, JSON, XML, CSV, TSV, XHTML, YAML
Swagger/ OpenAPI e.d. Rest - API- specificaties
Hibernate/ Quartz/ GraalVM
J2EE/ EJB/JTA/JPA/ JDBC/ JMS/ JAAS
Netbeans/ Eclipse/ IntelliJ/ Cloud9 e.d. IDE's
Cross platform development
AngularJS/ Vue/ Bootstrap
Angular(2+)/ React e.d. front-end raamwerken
AJAX/ Sockets
CSS(3)/ SASS/ Less/ Bootstrap/ Compass
NativeScript/ BlueStacks/ Android developm.
JSP/ JSF/ Struts/ GWT e.d.
Docker/ Rancher/ Compose/ Traefik/
JQuery/ Canvas e.d.
JEE(2)|JE 5-16 JDK, inc. all features
JBoss (EAP)/ Jetty/ Wildfly/ Tomcat/ GlassFish/Payara/ Websphere e.d. webservers
Ant/ Maven/ Babel/ Webpack/ NPM
Express - Node app-server
Hudson/ Jenkins/ CircleCI e.d. build-tools
Lambda Expressions e.d. declaratieve taal(extenties)

Databases

MySQL
PostgreSQL e.d. relationele en OO db's
Oracle/ BD2
MongoDB/ H2/ RethinkDB e.d.
Elasticsearch - Document db
Ehcache/ Redis/ Infinispan/ Caffeine e.d. caching strategieën