

Fullstack Software Engineer

Deploy quickly with confidence and delight your stakeholders with great user experience

Experienced full-stack software engineer with 10+ years building applications. Founded Bytle, delivering products across frontend, backend and infrastructure. Spreading its knowledge on [Datacadamia](#). Enjoy working on solutions with high impact.

NOTES

This PDF was created with a minimal layout for a successful Applicant tracking system (ATS) parsing. You can also navigate the graphic layout as [HTML](#) or [PDF](#) format.

CONTACT

- Name: Nicolas GERARD
- Email: gerardnico@gmail.com
- Location: [Oegstgeest \(Randstad, Netherland\)](#)
- Website: <https://nico.gerardnico.com>
- GitHub: <https://github.com/gerardnico>
- LinkedIn: <https://linkedin.com/in/gerardnico>

CHARACTERISTICS

Me in 3 points

- **T-shaped Engineer:** [Computer science](#) enthusiast. Tackled a broad range of complex real-world problems across [frontend](#), [backend](#), [infrastructure](#), data engineering and [business intelligence](#).
- **Give a damn:** High agency. Relentless result-driven with a high creativity on solutions. Being idle while waiting for a never-coming answer is not in my nature.
- **Clear Model Builder:** [Deep ERP modeling expertise](#), capable of building [clear models](#), spotting inconsistencies, understanding interconnections and trade-offs (Intractable problems find their source in bad models)

PORTFOLIO

Show, don't tell

- [Interact](#): A React Server Component framework built on top of Vite showing a strong understanding of front-end architecture.
- [Smtplib Server](#): Show casing a strong understanding of backend technology on the Application layer (Web) and Transport layer (TCP)
- [Kubee](#): A Kubernetes client to install idempotently a prometheus monitored cluster and deploy apps in one command.

RELEVANT EMPLOYMENTS

Last 2 employments with relevant projects. For the full list, check the [online version](#).

2019/26 - FULL STACK DATA DEVELOPER AT BYTLE

Founder, worked on application and business development

- [Ansible to Kubernetes migration](#) (Prometheus, Grafana, Helm, Jsonnet, Kustomize, ArgoCd)
- [ETL Workflow Engine Development](#) (Java, Graph, Real-Time, Polling)
- [Image Service Processing](#) (Sharp, Node Express, Vite Middleware)
- [Mail delivery platform development](#) (Smtplib, Java, Vertx, Dkim, Dmarc, Dns)
- [Multi-tenant Authentication Application](#) (OAuth, JWT, React, Postgres, Java Vertx)
- [Multi-tenant Mailing List Application](#) (Smtplib, Rest, GraphQL, React, Java Vertx)
- [React Rsc Server](#) (Vite Rsc, Middleware, Mdx, Jsx, Typescript)
- [SEO - Page Performance, Quality and Search Ranking](#) (Parser, Php, HTML)
- [Source and Sink ETL Connectors Development](#) - Multiple File (Java NIO) and Database Systems (JDBC)

2011/19 - SENIOR ENGINEER (BI, DATA, INFRA) AT HOTITEM

Worked on data engineering (dashboarding, reporting, data lake and data warehouse development) and data platform tasks (DBA, CI/CD, Cluster installation and monitoring)

- ▶ [Automotive Marketing Analytics](#) (Aws, Pl/Sql, Google Analytics Api integration)
- ▶ [Coaching Application Development](#) (Apex, Obiee, BIP, Java, JQuery)
- ▶ [Etl Workflow Performance Audit and Solutions](#) (Perf, Parsing, Statistics, Partitioning)
- ▶ [Oracle/Sap Hana loader development](#) (Partition, parallel thread, compression, buffering)
- ▶ [User Comments NLP analytics](#) (Python NLTK, Endeca)
- ▶ [Automatic Label Translation Application](#) (Java Swt, Oracle)
- ▶ [IGUS ERP Developer and Integration](#) (Oracle Forms, Report, Business Object, Pl/Sql)

RELEVANT PROJECTS

For the full list, check the [online version](#).

2021/25 - MULTI-TENANT MAILING LIST APPLICATION

Skills: [GraphQL](#), [Java](#), [Postgres](#), [React](#), [Rest](#), [Slate Editor](#), [Smtplib](#), [Vertex](#), [Vite](#)

Developed a multi-tenant mailing list application:

- ▶ Build a 2 steps subscription flow with domain check and signed validation link
- ▶ Developed the execution worker with MTA DNS Lookup (Dkim)
- ▶ Designed a multi-tenant data model, rest api (forms subscription) and graphql api (admin page)
- ▶ Build the front-end (parent/child relationship)
- ▶ Developed the [rich text editor](#)

2025/26 - REACT RSC SERVER

Skills: [Jsx](#), [Md](#), [Mdx](#), [NodeJs](#), [React](#), [Typescript](#), [Unified](#), [Vite](#)

Developed the React Rsc server [Interact](#).

- ▶ Designed the middleware chain to handle both HTTP and/or a React response allowing CMS integration
- ▶ Developed a document API to serve compiled modules (mdx, jsx, tsx) and runtime react component (md, cms tree).
- ▶ Built the plugins engine - react component (layout, content, context) and markdown unified plugins

2021/24 - ANSIBLE TO KUBERNETES MIGRATION

Skills: [Ansible](#), [ArgoCd](#), [Bash](#), [Docker](#), [Grafana](#), [Helm](#), [Jsonnet](#), [Kubernetes](#), [Kustomize](#), [Prometheus](#), [Terraform](#)

Migration of infrastructure from a [Ansible](#) push model to a [Kubernetes](#) pull model

- ▶ Created the [Kubee cli](#) to install the cluster and deploy [Helm](#) charts (with embedded [Jsonnet](#) and [Kustomize](#) project)
- ▶ Installation of the monitoring system - [Prometheus](#), [Grafana](#) on server, cluster and app level with a dead man switch
- ▶ Built devops release pipelines on top of Github workflow and [ArgoCd](#)
- ▶ Designed the secret management pipeline (pass, terraform, vault and external secret)

RELEVANT SKILLS

For the full list, check the [online version](#).

- ▶ [Backend](#): AuthN, ExpressJs, FastAPI, GraphQL, Http, Java, Modeling, NodeJs, Python, Rest, Vertex
- ▶ [Broker](#): Kafka, RabbitMQ, Redis
- ▶ [Cloud](#): Aws, Azure, Gcp
- ▶ [Computer Science](#): Ai, Algorithms, Compiler, Compression, Crypto, Event Loop, Iam, Languages
- ▶ [Crypto](#): Hash, Signature (Symmetric/Asymmetric), Trust Models (PKI, Acme)
- ▶ [Data Science](#): Ai, Data Viz, Notebooks, Python, R Lang
- ▶ [Databases](#): Clickhouse, MySQL, Oracle, Postgres, Redis, SQLite, Sap Hana, Sql Server
- ▶ [Frontend](#): Html, JQuery, Javascript, Jsx, React, Seo, Slate Editor, Svg, Typescript, Vite
- ▶ [Iam](#): AuthN, Jwt, Oauth/Oidc, Trust Models (PKI, Acme)
- ▶ [Performance](#): Algorithms, Compression, Data Structures, Modeling, Query Plan
- ▶ [Platform](#): Ansible, ArgoCd, Dns, Docker, Grafana, Iam, Kubernetes, Prometheus, Ssh, Terraform
- ▶ [Data Structures](#): Avro, Collections, Compiler, Graph, Json, Mdx, Parquet, Spatial, Svg, Table, Text, Xml

EDUCATION

- 1998 - Master Production and Computer Engineering (with honors) - University of Bordeaux - France
- 1996 - Bachelor Industrial Engineering with Production specialization (with satisfactory honors) - University of Burgundy - France

LANGUAGES

- **Dutch:** Fluent
- **English:** Fluent
- **French:** Native Speaker

INTERESTS

- **Games:** Chess, Rugby
- **Reading:** Product Design, Psychology, Computer Science
- **Sports:** Running, Swimming, Skiing