

# Milan Aleksić

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## Personal

Born on 21/12/1983, Smederevo (Serbia), living in Koekelberg (Belgium) since 2011. I have dual citizenship of Belgium and Serbia.

My website is [aleksic.dev](https://aleksic.dev), email is [milan@aleksic.dev](mailto:milan@aleksic.dev) and Twitter account is: [milanaleksic](https://twitter.com/milanaleksic). I am fairly active on [github.com/milanaleksic](https://github.com/milanaleksic). I also have a [LinkedIn account](#) if you'd like to connect with me.

## Education

Dipl. Ing. Computer Science & Engineering (2008) from *University of Belgrade* (Serbia), Faculty of Electrical Engineering (ETF)

“NARIC – Vlaanderen” [recognized diploma as M.Sc.](#)

## Spoken languages

- **Serbian** (mother tongue)
- **English** (fluent)
- **Dutch** ([C1 Effectiveness 1](#))
- **French** (A2, basic level)

## Keywords

Java, Go, AWS, Python, PostgreSQL, MySQL

## Experience

### Senior Software Engineer @ Soda (Belgium)

Place: **Remote/Brussels, Belgium**

Period: **2020-...**

Projects:

- soda.io Cloud Backend (founding) engineer
  - Programming languages: (mostly) Java, Python and cloud development on AWS using Terraform
  - Tasked with backend feature development, guidance and documentation. One of the first (“founding”) engineers and therefore I witnessed all the pivoting, market adaptations, surprising platform usage patterns, product evolution, became the company MySQL perf guy, guided or advised all the Soda Cloud development efforts...
  - Helped the company grow 100x in customers and revenue over 5 years without high-profile incidents or downtime of the Soda Cloud product
  - Beyond product and engineering impact, also introduced discipline in performance analysis and monitoring via DataDog, incident management and other operational concerns of the Soda Cloud
- Tool maker role:
  - deep incident analysis tool using custom dynamically created trace profiles - **datadog-exporter** (Go, Datadog API, SQLite, Perfetto)
  - internal tool for various admin tasks, including feature flip management, admin API back-channel, environment setup, DB dynamic password federation, framework for complex migrations, etc - **dopy** (Python3, Okta SSO+MFA, boto3)
- Broad exposure to data sources while helping bootstrap [Soda SQL](#): PostgreSQL, Redshift, Athena, Spark

## Expert Software Engineer @ TomTom (Belgium)

Place: **Ghent, Belgium**

Period: **2017-2020**

**CCE Team** Feature development and maintenance of various core systems and applications in *MPU Core Coverage Creation & Extension* team

Projects:

- *MLF library*: authored code-generated Java wrapper around GDAL OpenFileGDB (later extended to PostGIS and GeoPackage).
  - Custom ANTLR grammar for extended validation, Python/Markdown doc generator
- *Sinatra*: Led migration of a complex process into AWS for GIS source data digestion
  - PostgreSQL RDS, Spring Boot 2, SQS, ECS, Terraform, Vue.js
- *Pupin*: created machine learning cloud service for data classification (plural junctions problem)
  - Training: PostGIS, Python, Scikit-Learn, XGBoost, (Geo)Pandas, Jupyter
  - Online+Batch prediction: Terraform / AWS ECS, Spring Boot 2, XGBoost, REST
- *Dumbo*: migration of internal heavily used batch processing tool into the cloud
  - AWS Batch, ECS, PostgreSQL, S3, X-Ray; Spring Boot 2, Terraform, Python, Jenkins
- *Excelsior*: process orchestration service
  - [States Language implementation](#) (spec only), ECS+Lambda, Java 11, Python 3

**Hermes team** Feature development on new long-term systems and applications in *Hermes* team

Projects:

- *Nozem*: always-up-to-date OpenStreetMap ingestion service into core TomTom data layer
  - Kafka, PostgreSQL, Python, Spring Boot, Jenkins
- *Lego*: automated OpenStreetMap features ingestion
  - Kubernetes on Azure Cloud, Python, Java, QGIS Python plugins

## {Senior, Lead} Software Engineer @ Basware (Belgium)

Place: **Aalst, Belgium**

Period: **2013-2017**

Projects:

- *Basware Network Portal*: Full-stack development role on online and internal services
  - Tech stack: Play2, Scala, Java8, MongoDB, Spring, Chef, Go
  - Rewritten core validation business rules implementation (Java)
- *Basware e-Archiving*: DevOps lead-in-charge and one of lead developers
  - Tech stack: CloudFormation, Jenkins, Bash, AWS CLI
  - Cloud stack: Java Lambda functions, API GW, S3, DynamoDB, SQS, Splunk
- *Norsu* (Groovy, Cucumber, Gradle): Cross-systems end-to-end testing
- Business Metrics dashboards (Akka and Dashing.io)
- Migration of legacy Resin applications to Tomcat cluster
  - Oracle DB, JSP, RMI, Ant, Tomcat, Apache2
- *HAL9000* (Golang): Flowdock bot (CI/CD automation helper for 100+ developers)

## Previous work experience

**2014**: Freelance Consultant (remote) @ Gtech UK (*Brussels, Belgium*)

**2011-2013**: Software consultant @ Cronos (Belgium) (*Brussels, Belgium*)

**2009-2011:** Software Engineer II @ Gtech G2 Sports Betting (*Belgrade, Serbia*)

**2007-2009:** Java Developer @ Arius (*Belgrade, Serbia*)

**2006:** Intern software developer @ ESAProjekt (*Katowice, Poland*)

## Selected open source projects

- [Advent of Code 2023](#) (Zig)
- [Github Helper CLI](#) (Rust, Github API)
  - epic issues dependency graph handling, branch names and other “my flow” helpers
- [Personal Web site](#) (Hugo, Cloudflare Pages)
- [Advent of Code 2018](#) (Go)
- [gomakefiles](#) (Makefile, Bash)
  - Reusable Makefile files which allow cross CI/CD Go compilation with many useful tools
- [Igor](#) (Go Lambda, Vue.js, Google+, CloudFront, Cognito, DynamoDB)
  - “I am away” Flowdock bot, deployed via Semaphore.ci + CloudFormation

## Selected closed source personal projects

- Home Laboratory
  - Hybrid cluster (aarch64/amd64 debian/ubuntu, home/Oracle cloud) connected using Tailscale. NAS included
  - Infra as code: Ansible for foundational setup of bare new nodes, Nomad/Consul for container scheduling (25+ services like Gitea, Minecraft, yarr, etc.)
  - Monitoring via Grafana, InfluxDB, Grafana Loki and Tempo
- Thought Train (Go, PostgreSQL, ANTLR, NATS, Vue.js / htmx, Svelte, Flutter, Bootstrap)
  - Feature-rich web page content extraction & book annotation distributed service
  - Search Query grammar, Pulumi-based AWS cloud setup
  - mobile applications (Android, iOS) and Chrome Extension
- Batler (Go)
  - Telegram bot I use for home automation tasks like turning on/off my workhorse laptop, Windows VM and main notification pipeline
- Novinarnica (Go, Google OAuth, Batler)
  - Content crawler and CBR packager of magazines from [www.novinarnica.net](http://www.novinarnica.net)

## Miscellaneous

### Public talks

- (BeScala) [Introducing a reactive Scala-Akka based system in a Java centric company](#) with Jeroen Verellen, 2015