

## EMPLOYMENT

<b>Senior Software Engineer, contractor</b>	<b>Agentschap Wegen&amp;Verkeer, Flemish government</b>	<b>May 2017- current</b>
<ul style="list-style-type: none"><li>• Wrapp: mostly back-end work in Scala for loading, dissemination and pre-computation of the full raw Flanders road data.</li><li>• Geoloket2 &amp; common-kaart: front-end work for a web UI allowing users to create, explore, customise and distribute beautiful maps of geographic data of various types and sources. Design, implement reusable map component for many other applications.</li><li>• DAVIE: ingestion and validation of road related assets by companies external to AWV. Scala development of micro services on top of postgresql</li><li>• Dynamic Screens: modeling and tooling development for displaying and editing hundreds of different types of assets. Based on semantic web technologies. Node, Angular, TypeScript &amp; fp-ts</li></ul>		
<b>R&amp;D Software Engineer, contractor</b>	<b>Sony, Techsoft</b>	<b>April 2011- April 2017</b>
<ul style="list-style-type: none"><li>• Linear: developed algorithms for demand/response energy balancing in house-hold/small industrial settings.</li><li>• Philatelist: back-end development for telemetry for 11 million VAIO laptops.</li><li>• Hotspots: technical lead and back-end development for android app that shows interesting nearby photo spots, aggregating 100M photo locations.</li><li>• Instant communities: technical lead and back-end development for android app with innovative UI allowing virtually shared runs and competitions.</li></ul>		
<b>Central application architect, contractor</b>	<b>Bpost (Belgian Post)</b>	<b>August 2007 – March 2011</b>
<ul style="list-style-type: none"><li>• Supervising, maintaining &amp; teaching the corporate UI style guide and framework</li><li>• Supervising architecture of all (about 5 major) applications in the "mail" domain (30 developers)</li><li>• Supporting the build framework &amp; component repository</li><li>• Recruitment &amp; training of outsourced team members</li><li>• Maintaining &amp; evangelizing the catalog of corporate web services</li></ul>		
<b>Senior developer &amp; project architect, contractor</b>	<b>Toyota Motor Marketing Europe</b>	<b>August 2002 – May 2007</b>
<ul style="list-style-type: none"><li>• Kaizen: Technical follow-up of outsourced development. Later scoping of requirements and in-house prototyping of new features. Allowing Toyota to comply with new European regulations</li><li>• Roadside Assistance Extensions: lead design and implementation of web-based application allowing all European resellers to offer customized roadside assistance contracts</li><li>• Toyota Corporate Data: designing and implementing a component allowing all Java applications to tap into a shared catalog of importers, dealers, countries, etc.</li><li>• Parts Pricing system: this is a systems that sets retail prices for almost a million spare parts &amp; accessories for individual national distributors (each one selling between 100,000 and 300,000 parts). At first follow-up of outsource effort, later day-to-day operational support and maintenance and finally complete specing + redesign</li><li>• Service Products Portal: extension of Roadside Assistance, full technical lead responsibility up to managing budget for technical resources and deployment coordination.</li></ul>		
<b>Architect &amp; technical</b>	<b>Inno.com, various projects</b>	<b>July 1998 – April 2007</b>

**specialist, employee**

- Internal IT: supervising & mentoring internal IT support staff with technology decisions; especially network-related & Unix issues
- Toyota Motor Marketing Europe: technical support for enterprise-level architecture to move to web-enabled applications
- Toyota Motor Marketing Europe: document management & launch factory: designing solution and supervising small team
- Pan-European fish auction: architect and project management for first European web-commerce application joining most West-European fish auctions

**Teaching assistant****University of Ghent,  
Software Engineering Group****September 1994 – June 1998**

- Introduction to Information Technology (Pascal)
- Programming II (C, C++)
- Software Development and Object Oriented Languages I (C++)
- Software Development and Object Oriented Languages II (Java, Smalltalk, GUI's, software components)
- Object Oriented Analysis (OMT, UML, Software Patterns)
- Formal Methods (mathematical foundations of computer science)
- Guiding 15+ students in achieving their master thesis
- Developed components to secure applications with one-time passwords & smart cards

**EDUCATION****Ghent, Belgium****University of Ghent****October 1989 – June 1994**

- M.S.E. in Computer Science Engineering, June 1994, distinction 77%

**Self-study****MOOCs****2012-current**

- Learning from Data, Caltech, 2012
- Principles of Reactive Programming, Coursera, 2013
- Game Theory I & II, Coursera, 2013
- Programming Mobile Applications for Android Handheld Systems, Coursera, 2013
- Mining Massive Datasets, Coursera, 2014
- Data Science specialization: Computing for Data Analysis, Coursera, 2013; Getting and Cleaning Data, Coursera, 2015; Exploratory Data Analysis, Coursera, 2015; Statistical Inference, Coursera, 2015; Regression models, Coursera, 2015

**TECHNICAL EXPERIENCE****Languages and Technologies** (last years only)

- Java, Scala, JavaScript, TypeScript, Elm, R, Python, IntelliJ, VS Code, Emacs
- Akka actors, Akka streams, RxJava/RxAndroid/RxJs, Angular, Play, Akka-http, Cats, JUnit, ScalaTest, ScalaCheck, FS2, fp-ts, Cats
- Unix, Docker, CoreOS, Kubernetes
- Apache Cassandra, Elasticsearch, Hive, IndexedDB
- Apache Webserver, Tomcat, Jetty, HAProxy, nginx
- Gradle, Sbt, Hudson/Jenkins, Bamboo, Git, Github, Gitlab
- AWS (S3, EC2, FW, VPC, ...), GAE, Heroku, Map-reduce
- Functional (reactive) , Object-oriented & Aspect-oriented programming
- Agile development & Scrum, Test-driven development, Domain-driven development

**PATENTS**

- Apparatus, system and method for control of resource consumption and/or production, United States 20140228993
- Control system and method for control of electrical devices, Europe WO2013EP50505