Contact

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www.linkedin.com/in/pbackx
(LinkedIn)

www.streamhead.com (Blog)

Top Skills

Java

J2EE

JavaScript

Languages

Dutch

English

French

Certifications

3D Printing Applications

The 3D Printing Revolution

AWS Computer Vision: Getting
Started with GluonCV

TOP Scorer - Java Challenge
Belgium 2024

Publications

ActionScript Graphing Cookbook

Peter Backx

Senior Software engineer

Ghent Metropolitan Area

Summary

Peter is a seasoned software and data engineer, focused on data science and AI. Through his PhD, continuous studies and experience, Peter has a broad knowledge of how software development should work and how to apply it to gain understanding of the business metrics that really matter.

On a daily basis, Peter uses data as the building block to create new insights. Using techniques such as micro services, streaming data, artificial intelligence and deep learning.

Qualities:
* Problem solving & quickly gaining an understanding of new problems in new business sectors
* Not afraid to take initiative, both with advice and action
* Broad theoretical basis, but firmly rooted in actual practice

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Experience

IQGeo
Senior Software Engineer
January 2025 - Present (11 months)
Ghent, Flemish Region, Belgium

Peated
Owner
October 2010 - Present (15 years 2 months)

Longyan.io
Software and Innovation Engineer
July 2024 - October 2024 (4 months)

Longyan is a startup in the language teaching field. Longyan's goal is to make language learning easier and more engaging than existing solutions.

After iterating over a few options, we devised a solution to give language teachers a powertool for creating content suitable to the level of their student. The Graded Text Writer (https://gradedtextwriter.com/) uses LLMs and more traditional AI techniques to make it easy to adapt existing text to any language level.

I work together with the founder brainstorming on ideas and improvements, implementing, deploying, validating and iterating on the ideas.

Tech used: Python, FastAPI, TypeScript, Svelte, Sveltekit, Vite, Azure, Google Cloud, AI, OpenAI, ChatGPT

Daikin Europe
Freelance Senior Software & Data Engineer
January 2020 - July 2024 (4 years 7 months)
Gent Area, Belgium

At Daikin, the Ghent-based innovation and advanced development department is preparing new technology and new algorithms for use in existing and new Daikin units. My role is to improve, maintain and operate the EU-wide IoT and data infrastructure for gathering all data needed for enabling this innovation.

Highlights include:
- Maintain NodeJS based management serve
- Migrate manually maintained server to (Kubernetes) EKS using Terraform and enabling continuous integration
- Maintain and expand the monitoring capabilities using both Python and NodeJS
- Prepare and clean data using Python, Spark and various other tools

Tech used: NodeJS, Python, JavaScript, AWS (ECS, EKS, Fargate, IoT Core, Greengrass, Glue, Athena a.o.), Docker, Terraform, Raspberry Pi.

TomTom
Freelance Senior Java Developer and Data Engineer
October 2018 - January 2020 (1 year 4 months)
Gent Area, Belgium

At TomTom, I am part of the team that is overhauling the product creation stack. Processing huge amounts of map data into customer specific formats.

Core technologies: Java, Apache Beam, Apache Spark, AWS

Bayer Crop Science

Senior Java Architect and Data Scientist
September 2017 - October 2018 (1 year 2 months)
Gent Area, Belgium

I work in the R&D division that is tasked with integrating field research data from varied sources with mixed quality. Based on microservices, ontologies and semantic processing, the goal is to combine all knowledge and gain new insights.

Technology: Java, Spring, Spring boot, Elasticsearch, RDF, Python, Virtuoso, R, Tibco Spotfire, RapidMiner

Comsof
Freelance senior Java architect
October 2015 - August 2017 (1 year 11 months)
Gent Area, Belgium

Comsof is a market leader in fiber network planning. As part of the team I develop FiberPlanIT, its algorithms and the license server, keeping in an eye on proper architecture and processes.

The algorithms I helped optimize and develop use various artificial intelligence (AI) techniques, including A* search, constraint satisfaction, genetic algorithms and more.

I converted the desktop version of FiberPlanIT to a lightweight SaaS using Spring Boot and microservices. Deployed to Amazon EC2.

I moved Jenkins from an internal (and overloaded) machine to an automatically scaling instance on AWS.

Main technologies used: Java8, lambdas, Guice, Play, Jenkins, Spring boot, AWS, OptaPlanner

TomTom
Freelance Senior Java Consultant
October 2014 - September 2015 (1 year)

I helped TomTom in building their new transactional map-making engine as part of the team that worked on enhanced features such as phonetic transcriptions.

DevOps was at the core of TomTom's processes. Creating Java code only the start. Responsibilities included development of a multi-threaded Java application, automated functional testing with JBehave, describing the deployment process in Puppet.

I also helped in preparing the architecture for migration to Amazon Web Services and more specifically the Amazon EC2 container service (ECS)

Main technologies used: Java, Spring, Hibernate, Tomcat, PostgreSQL, Jenkins

De Persgroep Publishing
6 years

IT Project & Team Lead
October 2013 - October 2014 (1 year 1 month)
Kobbegem

Lead my international team in realizing the business vision for the new Single Sign On system.

The system is build on AngularJS and Java microservices. It is currently operational on all of de Persgroep's online assets.

Analyst/Programmer
November 2008 - September 2013 (4 years 11 months)

Develop the Persgroep's web assets as part of the digital team (eg. Belgium's biggest site, www.hln.be).
Technical analysis for many of the core components (eg, the single sign on system).

Replaced the Oracle based search with SOLR. Greatly reducing cost and maintenance and immensly improving search performance for all 900k+ daily visitors to HLN.be, Belgium's largest news site.

Logica
Consultant
April 2005 - November 2008 (3 years 8 months)

ING Bank
Consultant
May 2008 - October 2008 (6 months)

J2EE expert,

technical analyst,

incident analyst (third line support)

Isabel

Consultant

April 2005 - May 2008 (3 years 2 months)

Senior J2EE developer,

Networking expert,

Team leader

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Education

PhD, Computer Science (Burgerlijk Ingenieur
Computerwetenschappen) · (2000 - 2005)

Udacity

Nanodegree, Artificial Intelligence · (2017 - 2017)

MoS, Computer Science (Burgerlijk Ingenieur
Computerwetenschappen) · (1995 - 2000)