

## Contact

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## Top Skills

Python (Programming Language)

Oracle Enterprise Linux

Oracle NoSQL

## Certifications

Structuring Machine Learning Projects

Neural Networks and Deep Learning

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

# Peter van Onselen

Staff Engineer at The Economist

London, England, United Kingdom

## Summary

Hi, I'm Peter, a South African engineer living in the UK with a passion for building fast, resilient systems and helping others grow along the way. I work at the intersection of backend engineering, cloud infrastructure, and developer experience, with a love for clean code, TDD, and collaborative problem solving.

This past year, I led performance drives, cloud-native resilience work, and cross-team engineering excellence across CAAS & Athena teams in The Economist.

In past lives, I've helped architect high-performance APIs, lead platform migrations, and drive culture shifts toward better engineering practices. I get excited by elegant abstractions, meaningful metrics, and mentoring other engineers to do their best work.

Outside of work, I'm a lifelong Doctor Who fan, avid board gamer, and book devourer. I'm currently trying to teach myself urban sketching (with questionable success), and I still get emotional over great video game storytelling. I live in London with my wife and daughter, where we're figuring out the whole parenting thing one messy, wonderful day at a time.

Let's build something great, and maybe a little weird, together.

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## Experience

The Economist

Staff Engineer

October 2023 - Present (1 year 11 months)

London, England, United Kingdom

CAAS Team:

### CP2-API Performance & Stability

Spearheaded a migration from Aurora Serverless to provisioned DB instances, tuned provisioning settings, and stabilized Apex scores across web and mobile channels.

### CloudFront Caching Implementation

Architected end-to-end caching strategy for CP2-API and the mobile gateway, delivering 200%+ performance gains, removing Redis dependencies, and enabling stale-while-revalidate caching rules.

### Homepage Initiative

Led backend interface design and implementation, defined API contracts, and coordinated with Editorial Tools, Engagement & Mobile teams, ensuring seamless delivery and integration.

### Rich Topics & API Handover

Defined upstream/downstream interfaces, laid foundation for 'Rich Topics' deployment, and refactored the Search API, introducing CI/CD and unit tests, then gracefully transitioning ownership.

### Athena Team:

#### Developer Experience Enhancements

Enhanced build pipelines for sandbox and sandbox-dev environments to support feature-branch deployments, streamlining development workflows.

#### Homepage Feature Expansion

Mentored team members while delivering video homepage features and advanced UI component configuration.

#### Observability & Logging

Improved cross-system logging by embedding CloudFront IDs for tracing; refactored CP2-Transformer code to increase maintainability.

#### People & Leadership Impact

Championed TDD, clean-code, pairing & mobbing practices, actively mentoring engineering peers and fostering a collaborative culture.

Engaged in cross-team architecture discussions on caching, global APIs, and transit gateway deployments, driving consistency and innovation.

## Cazoo

3 years 11 months

### Staff Engineer

January 2023 - September 2023 (9 months)

London, England, United Kingdom

#### Car Care Team:

- Led the development of Addons for cars, post-sales purchase processes, and rearchitected addons systems for easy integration of new product lines.
- Successfully introduced Extended Warranties, Service Plans, and Paint Protection, resulting in increased GPU and attachment rates.
- Internationalized architecture, enabling sales expansion into France, Germany, Italy, and Spain.
- Introduced error automation, reducing support overhead and enhancing customer experiences.
- Conducted A/B tests and experiments on frontend UIs, increasing customer attachment and improving GPU.
- Mentored engineers to senior levels, instilling a quality-first mindset in the team.

#### Consumer Finance Team:

- Facilitated the rearchitecture of checkout to order systems, creating three distinct, stream-aligned teams for increased feature throughput.
- Stabilized support load, enabling efficient feature development.
- Mentored colleagues for career growth
- simplified alerting for faster response to support issues.

Utilized TypeScript, Serverless Framework, AWS Lambda, Amazon CloudWatch, GitHub, React.js, Amazon Web Services (AWS), Terraform, and Amazon SQS in architectural design and implementation

### Senior Software Engineer

January 2021 - December 2022 (2 years)

London, England, United Kingdom

### Software Engineer

November 2019 - January 2021 (1 year 3 months)

London, United Kingdom

## Oracle

Principal Member of Technical Staff (Software Developer IC4)

February 2014 - August 2019 (5 years 7 months)

Cape Town, South Africa

I worked in the Infrastructure team as part of the Compute division of Oracle Public Cloud Infrastructure Classic (OCIC), an IaaS service for rapidly provisioning virtual environments. I was responsible for development of new features, production support and bug fixes.

During my time in the team I worked on a number of projects including the following:

- \* Added authentication and versioned updates and deletes to a NoSQL Shim.
- \* Worked on a Compute-Platform java library which would contain all common code elements between services, to speed up service writing.
- \* Database Limit Service, designed and implemented a service aimed at preventing a single customer from filling up the database.
- \* Various DNS modifications.
- \* Log message ID build validation and creation tool.
- \* Migrated an existing service to Gradle as well as updating its internal dependencies.
- \* Optimizations to indexing of NoSQL data based on production observation.
- \* A Kubernetes layer in the Dom0 of the admin clusters, along with Docker containerizing of existing services.
- \* Inventory Service for Fleet management

Technologies used:

Python, Java, Docker, Kubernetes, Oracle Linux, Make, Bind9 DNS, Oracle NoSQL, Twisted, Elasticsearch, Logstash, Kibana

## Table Mountain HEMA

Creator and Maintainer of TableMountain HEMA website

June 2018 - August 2018 (3 months)

Cape Town Area, South Africa

Created a website for a HEMA club I participate in, to give the club a web presence. One of the aims of the project was to make it as affordable as possible to host and maintain.

Jekyll, Github, Ruby

<https://www.tablemountainhema.co.za/>

Python Software Society for South Africa  
Volunteer Conference Organizer  
February 2016 - October 2017 (1 year 9 months)  
Cape Town Area, South Africa

I was a volunteer organizer for the PyConZa Conference responsible for the Venue portfolio and was a member of the Executive Team of the committee.

Entelect Solutions  
Senior Software Engineer  
November 2010 - January 2014 (3 years 3 months)  
Johannesburg Area, South Africa

While at Entelect I worked in a number of roles. First I was a member of the Projects team which would create bespoke products for clients. I was then contracted out to Standard Bank as a Senior Software Engineer working on Online Share Trading.

Client: Numetro Home Entertainment (2010)

Role: Software Engineer

Developing custom components for existing systems for managing back office processes

-ASP .NET, MVC, Javascript/jQuery, MS SQL 2008

Client: CIB Insurance (2010)

Role: Software Engineer

Extending and Maintaining existing back office tools and processes

-ASP.Net, MS Sql 2008, Javascript

Client: Thakwell & Whittaker (2011)

Role: Software Engineer

Developing a custom workflow and scheduling web application to assist clients business processes.

-ASP.Net, MVC 3, Entity Framework, Windows Azure, MS Sql 2008, Javascript/JQuery

Client: Standard Bank Online Share Trading (2011 - 2014)

Role: Senior Software Engineer

Project: Integration with JSE MSS (Market Services System)

- System analysis, design and development to integrate with JSE BDA replacement system MSS.

Project: New on boarding system for new clients

- Create an ASP.Net MVC portal to replace legacy ASP Classic on boarding system and integrate with existing OST systems

Project: Rewrite of Equity Trading system

- Replace legacy equity trading subsystems with redesigned generic trading module

Project: New product Covered Calls development

- new trading product for the OST system

- ASP Classic, ASP.NET, ASP MVC 2 - 4, C#, MS Sql 2008, nHibernate, Ninject,

University of Johannesburg

Teaching Assistant

2008 - 2009 (1 year)

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## Education

University of Johannesburg

Masters of Information Technology, Artificial intelligence · (2009 - 2010)

University of Johannesburg

BSc Honours in Information Technology, Information  
Technology · (2008 - 2008)

University of Johannesburg

BSc Information Technology, Computer Science · (2005 - 2007)