

ANGELO MELONAS

The Hague, Netherlands

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EXPERIENCE

Castor (Identity Team)

Software Engineer

Dec 2023 - Present

Amsterdam, Netherlands

- The goal of new Identity team is to unify all products with a single login portal. This means having a central identity and access management system responsible for managing all authentication actions across all Castor applications
- Configured Keycloak and created various Keycloak SPIs (extensions) such as a custom registration page and allowing applications to generate “Action Tokens” via the Keycloak API
- Design and created a PHP SDK to allow applications to use the Keycloak API more effectively
- Migrated a large amount of user data (including credentials) from the eConsent application’s Keycloak to the new Identity Keycloak
- Technologies: PHP, Java, Keycloak, OIDC, OAuth2, MySQL, Docker, Datadog

Castor (eConsent Team)

Software Engineer

Oct 2020 - Dec 2023

Amsterdam, Netherlands

- Joining the eConsent team (as a backend engineer) at its inception provided exposure to the full life cycle of a greenfield project. While employing the SCRUM methodology, the team worked in two-week Sprints to convert business requirements into features. This entailed working with the product owner to refine the scope of work, and with the QA team to ensure feature quality.
- Implemented webhooks to allow external services to be notified when certain eConsent API endpoints are called
- Migrated the implementation of Enqueue, an asynchronous message handling service, to the more modern Symfony Messenger Component (using Doctrine as the transport type)
- By using profiling tools such Xdebug and DataDog, performance issues with the custom-built variation of RBAC were discovered. Performance was then greatly improved by using SQL queries to batch-insert data instead of relying on the Doctrine ORM
- Used Azure Functions to prototype a PDF generation tool to migrate away from the deprecated WKHTMLTOPDF library
- Adhered to strict code quality (using tools such as PHPStan, PHPCS, Infection) and testing unit-, functional-, and acceptance testing (PHPUnit, Behat)
- Contributed to on-call rotation (PagerDuty, Blameless) for application availability
- Technologies: PHP, Symfony, API Platform, Doctrine, MySQL, Docker, Ansible, Datadog, Keycloak

bunq (IT Team)

Backend Developer

Sep 2019 - Oct 2020

Amsterdam, Netherlands

- Worked in a fast-paced startup environment, where weekly releases meant focusing on delivering features quickly and efficiently. The backend team was responsible for implementations in the context of a RESTful API, using bunq’s custom-built PHP framework, “Phava”
- Added Apple Pay and credit card payment options to the bunq.me payment links feature using third-party facilitators (Apple Pay on the Web and Checkout)
- Maintained the bunq public SDKs on GitHub for integration with third-party projects (PHP, Java, Python, C#)
- Implemented rate limiting using Redis to prevent abuse of the API
- Technologies: PHP, MySQL, Redis, GitLab

VASTech (Common Service Platform Team)

Junior Software Developer

2018 - Aug 2019

Stellenbosch, Western Cape, South Africa

- Lead the research, design and implementation of a modern web-based single page application for managing in-house microservices. The new application was meant to replace the existing server-side application (Vaadin), but eventually become the technology stack adopted for all new projects
- Developed a prototype backend-agnostic web-based chat application using gRPC and web sockets. Using gRPC on the server implemented in (for example) Java and Spring Boot, with Vue.js, TypeScript and gRPC-web on the frontend, the application employed the Envoy proxy to translate requests between gRPC and HTTP/1.1
- Technologies: Java, Spring Boot, gRPC, gRPC-web, MySQL, Hibernate, Vue.js, Vuetify, TypeScript

VASTech (Signal Acquisition Management Team)

2017 – 2018

Junior Software Developer

Stellenbosch, Western Cape, South Africa

- Designed, implemented, tested, and maintained features of a legacy Eclipse RCP application for managing a satellite communication capturing system
- Full-stack responsibilities included UI development, server-side code, and database management
- Configured and maintained in-house developed hardware components for integration testing
- Technologies: Java, Eclipse RCP, gRPC, MySQL

MWR InfoSecurity

Dec 2015

Security Consultant Intern

Rivonia, Gauteng, South Africa

- Used various penetration testing techniques to identify vulnerabilities in a web application

TECHNICAL STRENGTHS

Languages	PHP, Java, SQL, JavaScript, Python
Protocols & APIs	JSON, REST, gRPC, OIDC, OAuth2
Frameworks	Symfony, API Platform, Spring Boot, Vue.js
Databases & ORMs	MySQL, Doctrine, Hibernate
Tools	Git, Docker, Ansible, Datadog, Keycloak, PagerDuty, Xdebug, Redis

EDUCATION

University of Stellenbosch (Stellenbosch, South Africa)	<i>2016</i>
BSc (Hons) Computer Science	
University of Stellenbosch (Stellenbosch, South Africa)	<i>2015</i>
BSc (Mat Sc) Computer Science and Applied Mathematics	

PERSONAL PROJECTS

Vue Scroll Snap (vue-scroll-snap)

A simple Vue component that allows fullscreen vertical and horizontal scroll snapping

WhatsApp Voice Message Transcriber (whatsapp-voice-message-transcriber)

A prototype application that allow WhatsApp users to forward voice messages to a WhatsApp bot, which uses the OpenAI API to return the transcribed message.

Written in PHP using the Symfony framework, the Netflix WhatsApp Cloud API and the OpenAI PHP client.

The Ray Tracer Challenge (php-ray-tracer)

Following the book “The Ray Tracer Challenge” by Jamis Buck, I implemented (most of) the ray tracer in PHP using Behat for Test-Driven Development.