Daniele Tortora | Senior Software Engineer

☑ Email

⊘ Website

○ GitHub

② Zurich, Switzerland

Experienced Software Engineer with over 8 years in the industry, specializing in full-stack development and cloud technologies. Proven track record of building interactive and performant user interfaces, platform and development tooling, data-intensive applications, robust APIs and scalable distributed services.

WORK EXPERIENCE

SNYK

May 2024 - Present

Software Engineer

Zurich, Switzerland - Hybrid

- Enhanced Snyk's Open Source offering by designing and implementing features for Deepcode AI, a Software Composition Analysis (SCA) scanner leveraging Program Analysis techniques to identify vulnerabilities and provide remediation. The scanner processes and analyzes millions of build and manifest files from Gradle, Maven, and Pip ecosystems, serving thousands of enterprise customers with high accuracy and performance.
- Developed and deployed Dockerized microservices using TypeScript, Node.js, and Express across multiple Kubernetes clusters (AWS, GCP) using Helm Charts. Implemented REST APIs adhering to JSON API and OpenAPI specifications, contributing to a distributed system that supports enterprise-scale workloads.
- Collaborated with engineers across divisions to build a benchmarking service integrating existing scanners and open source tooling. Designed and developed a data processing pipeline to generate accuracy metrics from dependency graphs, enabling meaningful comparisons across tools. Provided data-driven insights that shaped internal team roadmaps and feature prioritization, amplifying the impact of cross-team collaboration.
- Enhanced scanner performance by implementing a Redis caching layer, optimizing concurrency for I/O-bound tasks, and fine-tuning Worker Threads for CPU-intensive computations. These strategies, monitored using Datadog, Prometheus, and OpenTelemetry, significantly reduced scan processing times and improved throughput and response rates during high-demand scenarios.

FRONTIERS

Feb 2023 - May 2024

Technical Lead

Zurich, Switzerland - Hybrid

- Led a team of 6 developers in the development and launch of Brink UI, a Vue 3 Component Library built in TypeScript, aligned with a new Design System. Delivered the library from inception to alpha within 5 months, piloted across multiple projects. The library's adoption reduced UI development time by 30%, while enhancing cross-project consistency and streamlining component reuse and maintenance.
- Led DevOps efforts within the team, implementing CI/CD pipelines using monorepo tooling (Lerna, NX, Node.js, GitHub Actions) and streamlining release processes (alpha, beta, stable) for efficient distribution via the NPM registry. Established a collaborative release review process with Designers and QAs, reducing defect rates and enhancing cross-functional teamwork focused on quality.
- Conducted research into open-source libraries and build tooling to ensure compatibility with frameworks such as Vite, Nuxt.js, and Tailwind. Developed custom Storybook plugins using AST parsing to enhance the Vue authoring experience. Contributed to the Storybook roadmap, identifying and addressing key bugs within the Vue ecosystem.

META (FACEBOOK)

Jun 2022 - Feb 2023

Frontend Engineer (Contract)

Zurich, Switzerland - Hybrid

- Collaborated with the Mapillary team (acquired by Meta) to integrate their platforms and infrastructure into Meta's ecosystem. Developed a strategic roadmap for the gradual migration and worked closely with stakeholders to identify and implement effective solutions.
- Partnered with the Facebook and Instagram Design System teams to explore the deployment of an independent Design System/Component Library tailored for Mapillary products, with a potential Headless system based on Facebook's library.
- Led the rewrite of the Mapillary website, migrating from Next.js to React, PHP, and Facebook CMS. Achieved a 36% improvement in Accessibility, a 17% boost in Performance, and a 25% increase in SEO scores. Enhanced Core Web Vitals, reducing First Contentful Paint (FCP) by 20% and Largest Contentful Paint (LCP) by 60%, significantly improving user experience. Spearheaded the implementation of internationalization (i18n) for

Mapillary web apps (Angular, TypeScript), enabling localization across 24 languages to improve accessibility and reach.

TUNDRA

Nov 2021 - Jun 2022

Senior Frontend Engineer

Zurich, Switzerland - Hybrid

- Pioneered web security enhancements on WholesaleCoop.com by designing an improved authentication strategy and implementing the entire UI authentication flow.
- Directed Tundra.com's e-commerce platform transition to a hybrid rendering model using Next.js, yielding a 20-40% improvement in Core Web Vitals metrics.

TRAY.AI Jan 2021 - Oct 2021

Senior Frontend Engineer

London, UK - Remote

• Led the transition of Tray Documentation from Gatsby to Next.js, creating a custom compiler for interactive page generation. This improved the editing experience for technical writers and set new stylistic standards.

OVO ENERGY | NOBLE LTD | LONDON BOROUGH OF HACKNEY

Sep 2016 - Jan 2021

Software Developer

London, UK - Hybrid

- At OVO, I developed an interactive map across Web, Android, and iOS using React, React Native, Mapbox and React Map GL.
- At **Noble**, I contributed to the development of Noble Vision, a real-time network threat dashboard, transitioning the app from an Electron-based desktop application to a web-based solution using React, Redux, TypeScript, and GraphQL.
- At **Hackney**, I built web features using Angular, TypeScript, C#, and .NET Core

EDUCATION

Università degli Studi di Napoli Federico II

MSc Clinical Psychology. Grade: 110/110

Università degli Studi di Napoli Federico II

Naples, Italy

MSc Psychology. Grade: 110/110

Naples, Italy

2008-2012

SKILLS

Languages: TypeScript, JavaScript, Go, PHP, HTML, CSS Web Technologies: React, Node.js, Next.js, Express,

Vue, Angular, GraphQL

Database Systems: PostgreSQL, MongoDB, Redis

DevOps Tools: Docker, Kubernetes, Helm, CircleCl,

GitHub Actions

Cloud Platforms: AWS, Google Cloud Platform **Soft Skills**: Communication, Problem-solving, Team

Collaboration, Mentoring