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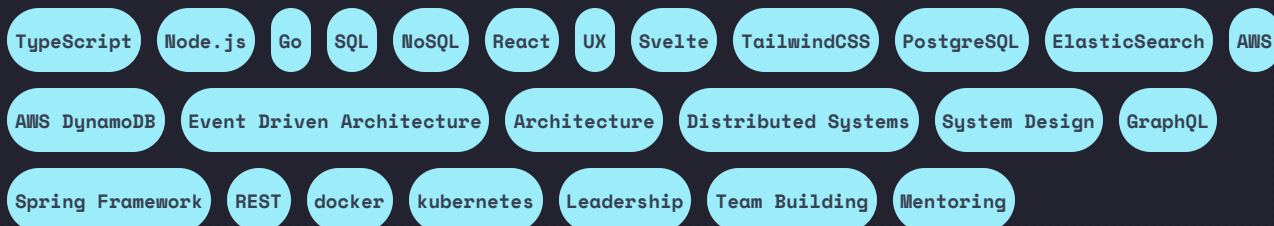
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chaos.mk 

With over 13 years of experience in software engineering, I am dedicated to driving excellence in both software development and team leadership. My expertise in web-based systems has led to the creation of enduring products and successful digital transformations across various industries. By employing a first-principles approach and focusing on critical priorities, I address complex challenges with solutions that closely align with business objectives. My commitment to innovation motivates me to continuously explore new methods, optimizing both backend and frontend systems to achieve significant impact.


Skills



Experience

Omnevue

Lead Software Engineer/Engineering Manager

 Feb 2022 - current

- Led engineering efforts for Omnevue, focusing on the secure and efficient processing of large volumes of accountancy documents (invoices, journal entries, bills) for ESG reporting in compliance with EU regulations.
- Established the initial tech stack, architecture, coding guidelines, deployment pipelines, and observability tools, ensuring continuous improvement and adherence.
- As the sole engineer for the first 6 months, delivered key features including billing, payments, data collection, accountancy integration, data security, reporting, 3rd party API integrations and infrastructure setup.

- Recruited, onboarded, and managed the initial engineering team.
- Developed a merchant categorization methodology based on the Exiobase taxonomy using generative language model AI and ElasticSearch, spanning 16 million merchants.
- Utilized a range of technologies including AWS services (Lambda, S3, EC2), Node.js, TypeScript, and React.
- Implemented infrastructure-as-code and CI/CD pipelines using AWS CDK, AWS Lambda, and GitHub Actions.

Technologies: AWS CDK, AWS Lambda, AWS DynamoDB, AWS S3, AI, ChatGPT, Node.js, TypeScript, GitHub Actions, zod, Open banking, Stripe, Codat, xlsx, React, vuejs

Promotion Digitale (Gesundheitsförderung Schweiz)

Technical Lead


 Apr 2021 - Feb 2022

- Led engineering efforts to digitalize internal and external processes at a Swiss Federal Health institution.
- Actively contributed to an open-source WYSIWYG editor library (draftjs), crucial for project success.
- Championed the adoption of HasuraSQL to transform a PostgreSQL database into a GraphQL API. Led database modeling in 3rd normal form and ensured row-level security (RLS) per user.
- Implemented data entry forms and wizards using React, and mentored new engineers on React and web development best practices.
- Engineered a Kubernetes cluster for the project and trained the team in its operation and maintenance.

Technologies: React, TypeScript, GraphQL, hasura, urql, styled-components, material-ui, Java, Spring Framework, PostgreSQL, kubernetes, Grafana

Infostore (Netcetera AG)

Technical Lead

 Aug 2020 - Mar 2021

- Architected a system to display Postgres DB data using metadata and GraphQL introspection schema from Hasura.
- Pioneered one of the initial Go projects, guiding the team on language idioms and ecosystem best practices.
- Introduced and guided the team in adopting Svelte as a frontend framework.

- Collaborated on creating a custom DSL for defining screens and displayed data.
- Utilized Docker containers for deploying the Go binary and frontend resources.

Technologies: Svelte, GraphQL, hasura, urql, Go, docker

TREPO

CTO – Chief Technology Officer

 Jul 2018 – Apr 2020

- Co-founded a startup providing last-mile delivery solutions for B2B and B2C customers.
- Independently developed the project for the initial months and later managed a team of 5 engineers.
- Addressed routing challenges, including ad-hoc deliveries and dynamic route changes using real-time congestion data and safety rules.
- Implemented binary data parsing for multiple GPS tracking devices.

Technologies: React, TypeScript, styled-components, material-ui, Java, Spring Framework, PostgreSQL, Apache, nginx

KAP (Gesundheitsförderung Schweiz)

Technical Lead

 Jul 2018 – Jul 2020

- Lead the frontend team of engineers in a project where the main focus was digitalizing the internal processes of a Swiss Health Federal institution.
- Led the building of various forms, wizards while employing idiomatic form handling best practices and coaching the whole team on them and React.
- Implemented backend services in Java 10 and Spring Boot 2.0, focusing on the business logic and data access layer.
- Actively contributed to the react-final-form and material-ui open source projects during the duration of the project

Technologies: React, TypeScript, styled-components, material-ui, axios, Java, Spring Framework, PostgreSQL, traefik, docker

Fred (mkHost)

Software Architect

 Jun 2018 – Dec 2020

- Developed a HTTP REST API to modernize communication using XML abstracting the EPP protocol.
- Implemented duplex TLS socket communication with connection pooling.
- Debugged TLS socket handshake connections, resolved X509 certificate chain issues, and guided the technical team on the other side in fixing them.
- Implemented web scraping to retrieve company EINs from a governmental website lacking an HTTP API.

Technologies: Java, Spring Framework, Spring Boot, PostgreSQL, AWS EC2, AWS S3, nginx, TLS, XML, XML Digital Signing

RISIC

Technical Lead


 Feb 2018 – Feb 2019

- Led a team in developing an ML-backed product for processing and classifying high volumes of insurance claims from the United Arab Emirates to detect potential fraud.
- Resolved complex big data challenges, enhancing system scalability and performance.
- Mentored interns in creating a frontend application with interactive data visualization through charts and graphs.
- Architected the system and oversaw the data ingestion process managed by the machine learning team.

Technologies: React, TypeScript, Java, Python, Spring Framework, Spring Boot, Apache, docker, SQL, microservices

Global Financial Planning Platform (UBS)

Technical Lead


 Feb 2017 – Jan 2018

- Managed a team of 6 engineers within a global team of 40, developing a full stack web application to forecast individuals' wealth using diverse methodologies.
- Pioneered the adoption of modern tech practices by implementing frameworks like React for frontend development and ensuring seamless data flow from backend systems.
- Wrapped a bank-provided jQuery-based design system into a React component library to ensure a consistent look and feel across the application.
- Oversaw various engineering efforts across streams and collaborated with business analysts and leads to steer the overall project.

Technologies: React, Flow, styled-components, Java, Spring Framework, OracleDB

Prospect Zone (UBS)

Technical Lead


 Jul 2016 - Feb 2017

- Led a team of engineers in developing a public-facing full-stack application for Swiss users to compare real estate mortgage options.
- Rewrote and isolated significant functionality from existing software while maintaining constant communication with business analysts to ensure accurate implementation of various business rules.
- Ensured support for almost all browsers, including legacy ones, to cater to a large target audience.

Technologies: angularjs, Java, Spring Framework, OracleDB

Paymit (Finnova)

Technical Lead


 Apr 2016 - Aug 2016

- Three person team focused on a project with 3 month milestone for a proof-of-concept system that will enable money sending between users from the same bank.
- Solo developed the backend API that served web/iOS/android applications.

Technologies: Java, Spring Framework, Spring Boot, PostgreSQL, nginx, openapi

Dimensions (Wüest Partner)

Software Engineer


 Apr 2015 - Jun 2016

- Built a custom-tailored full stack application for real estate evaluators in Switzerland and Germany.
- Developed custom Excel-like functionality supporting filtering, formulas, and formatting in the browser, requiring deep expertise in JavaScript, DOM, Virtual Lists, AngularJS internals, and Chrome Profiling.
- Implemented a custom DSL for formula evaluation, enabling seamless computational additions by business analysts.
- Modeled core database entities and implemented multi-tenancy.
- Contributed to migrating from OracleDB to PostgreSQL.

Technologies: angularjs, Java, Spring Framework, Apache, PostgreSQL

Merchant Plug-In (NCA)

Software Engineer

 Oct 2012 - May 2020

- Developed an SDK and a full-stack web application (dashboard) for merchants to process transactions with the VISA 3DS 1.0 protocol. The SDK is still responsible for processing millions of transactions per year.
- Engineered and utilized a performance test suite to actively monitor the performance of the SDK during its development with an intent to react quickly to any deterioration of response times.
- Maintained and enhanced the application independently post-development phase.
- Wrote the publicly available docs and worked with customer integration teams to clarify and explain both technical and business concepts.
- Identified critical security vulnerability in Spring framework, leading to credited disclosure at <https://spring.io/security/cve-2014-0054>.
- Facilitated integration and compliance with payment schemes (MasterCard, Visa, JCB, American Express) following VISA 3DS guidelines.

Technologies: Java, Spring Framework, Spring Boot, JavaScript, Apache, XML, XML Digital Signing, TLS

Education

Bachelor of Science in Software Engineering and Information Technologies

- Ss. Cyril and Methodius University, N. Macedonia | 2012