

Alex Zall

** Software Engineer

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https://zall.dev

** Principal, Lead, Staff, Senior

SUMMARY

I'm a software developer with nearly two decades of hands-on experience, spanning roles from Principal Developer, Team Lead, and Head of Engineering. Among my past employers are some well-known names such as Soundcloud, Zalando, and Volkswagen. In my career, I have faced the challenges of running software systems at scale and high load and those that heavily utilize the latest developments in AI.

Now I'm seeking a leadership but hands-on role where my diverse skill set can contribute to the company's success.

HOW I CAN CONTRIBUTE

- Delivery quality code. Backend, Frontend, DevOps (including AI ops). In TypeScript and Python.
- Design software systems, picking the right tool for the job. I do not limit myself to a particular technology set.
- Lead an engineering team following some flavor of an agile methodology.
- Transition it to microservices or to Serverless. Split the monolith and untangle legacy software.
- Set up essential SRE tools. Logging/Monitoring/Alerting.
- Set up ETL pipelines to stream your operational data to your datalake.
- Define code guidelines and best practices for the team.
- I adopt an end-to-end mindset in my teams where anyone can contribute as a front, back, QA, DevOps engineer.
- I promote a learning culture in my teams. Monthly tech talk, lunch tech discussions, etc.
- Set up on-call rotation and run books.
- Wear a hat of a Product or Project owner in a lack of a dedicated person.
- Hire engineers. Develop hiring guidelines and coding challenges.
- Promote ideas of inclusion and diversity.

HOW I CAN NOT CONTRIBUTE

- Though I have some simple machine learning models running in production I do not have expertise in neural network design.
- I would refrain from a Head of DevOps role. Despite having lots of DevOps/SRE/QA experience I identify some of my weak spots in that area. Especially when it comes to security and cyber attack response.
- I have no production record working with smart contracts. Thou, I have studied Solidity and have a crypto pet project.
- I would refrain from a lead position in Data Engineering and Mobile development.
- I have very little experience with GoLang, Rust, and Kotlin but I'd love to gain it.
- I'm terrible in CSS and Layouting.

TECH BUZZ

- Languages: Typescript, NodeJS, Python, Scala, Java
- Cloud providers: Google Cloud Services, Amazon Cloud Services, Microsoft Azure Cloud
- ML/AI: Tensorflow, LLM, ChatGPT, LLAMA2, HuggingFace, Replicate, Whisper, VertexAI, LangChain
- DevOps: Docker, Kubernetes, Hashicorp Nomad, Terraform, Prometheus, Grafana
- **Databases**: Postgresql, Cassandra, Firestore, Redis, DynamoDB, etc.
- Messaging systems: Kafka, rabbitMQ, PubSub, SQS, SNS, Kinesis etc.
- Frameworks: React, VUE3, NextJS, Tailwind, TypeORM, Prisma
- CI/CD: CircleCI, Google Cloud Build, GitHub Actions, Microsoft DevOps
- Methodologies: SCRUM, TDD, Clean Code, SOLID

AVAILABILITY

1 June 2024

EDUCATION

Novosibirsk State Technical University Sep 2003 - May 2008

Specialist degree (Masters) in Math and Computer Science.

LANGUAGES

English — Professional Russian — Native German — B2

EXPERIENCE

Beeboard GmbH Berlin — Head of Engineering

Dec 2023 - present https://www.beeboard.eu

I joined Beeboard at an unfortunate time. After just 4 months from my start date, investors decided to put the project on halt due to financial reasons.

In my short time as a Head of Engineering I

- Set up visibility and alerting framework including monitoring dashboards, logging, and alerting.
- Refined the team's ways of working. Developed a guideline on how to work with a Kanban dashboard, branch code, test, and deploy.
- Unit Tests, Integrations Tests, E2E tests!!!
- Developed code guidelines and best practices that are now forced during the code review process.
- Educate the team on the topics of computer science fundamentals.
- Reffactor a legacy codebase increasing performance and maintainability.
- Speed up a development cycle by introducing a common development environment.
- Optimized CI build pipelines and improved deployment times.
- Introduced a concept of a personal development plan for my team.
- Promoted a learning culture and knowledge sharing.
- Identified unmotivated team members and let them go.
- Developed a hiring framework and a coding challenge.

Stack: TypeScript, Node, Docker, Azure Cloud, PostgreSQL, Hahicorp Nomad, Terraform.

Zapp (Quickcommerce LTD) London/Berlin — Principal Software Engineer / Software Developer Manager

June 2021 - Feb 2023

https://tryzapp.co.uk

Zapp is a grocery delivery service at that time operating in the UK, Netherlands, and France.

In Zapp I was alternating between individual contributor and team lead roles. My team developed a set of solutions to cover all the operations inside the store. I also worked shoulder-to-shoulder with our dev-ops team to develop company-wide standards for CI/CD monitoring and Event Sourcing.

I promoted a culture of feature full-stack teams and mentored frontend developers to also contribute to frontend and dev-ops tasks.

My team and I

- Developed a set of tools to facilitate operation inside a store. Picking, order tracking, returns, delivery, order stacking, etc.
- Contributed to the last-mile delivery app Zephyr. It showed the state of the order and the rider's fleet on the map.
- Contributed to overall company-wide software architecture.
- Trained an ML model to predict the delivery time based on over 40 parameters and integrate it into the ordering process.
- Integrating with other storefronts like Uber Eats and Deliveroo
- Contributed to the development of company-wide monitoring tools and ops infrastructure.

• I was the responsible person for organizing knowledge sharing in the company. I've organized and facilitated tech talks and demos.

Stack: Firebase and Google Cloud Services, React, TypeScript, Tensorflow, Python, Terraform, Docker

MOIA (Volkswagen), Berlin/Hamburg — Senior Software Engineer

Mar 2019 - June 2020

https://www.moia.io/en

MOIA is a company under the Volkswagen umbrella. The main challenge there was to optimize supply for the demand to match a particular van to a particular order and also re-distribute vans across the city to decrease waiting time.

I have

- Built a real-time simulation service that simulated the van's behavior based on real-life demand data.
- Contributed to a step-by-step simulation service. This service could simulate a week of real-life fleet behavior which allowed to assess different ride-sharing algorithms.
- Contributed to a "dispatching" service that aggregated the state of the fleet in real-time showing the vans, their routes, and customers on the map. This service was the backbone that connected vans, customers, ride-optimization services, and fleet managers.

Stack: AWS, Scala, ZIO, AKKA, Reddis, Amazon IOT, Kubernetes, Docker

Zalando, Berlin — Software Engineer

Nov 2017 - Aug 2018 https://zalando.de

Zalando is Fashion e-commerce service

In my time in Zalando, I've contributed to a few projects.

- Product image labeling with AI. Service described the item by "looking" at its pictures
- Product image verification. Service checked that the item has all of the required images and that the images are in the right format. White background, shoes facing right and taking 75% of space, etc.
- Set up team's own data lake with Amazon Redshift and Airflow

Stack: AWS, Scala, ZIO, Kafka

Soundcloud, Berlin — Software Engineer

Feb 2013 - Jul 2017

https://soundcloud.com

In my almost 5 years in SoundCloud I probably got the biggest skill boost in my career as I was working shoulder to shoulder with the most talented people from around the world. I've also learned how a healthy and pleasant work environment can look like.

Some highlights from those years are

- I am the man behind the canonical SoundCloud audio player on the web.
- I've also contributed to mobile audio players.
- In the copyright protection team, we developed a pipeline that identified and automatically took down any upload that infringed someone's copyright.

• I've become a scala developer and learned Functional Programming techniques..

Stack: Scala, Java, JavaScript, Cassandra, Kafka, AWS, Docker, Kubernetes, FFMPEG, GStreamer

OTHER PROJECTS

There are a few other projects worth mentioning.

Super-Real

https://super-real.co/ https://super-real.co/zall

Super-real is a web-based chat where anyone can chat with celebrities or influencers backed by an AI.

With a team of only 3 devs part-time, we have achieved an incredible outcome in just two months leading the project to production worldwide and generating revenue. My responsibilities were everything AI-related

- Prompt engineering to better impersonate a persona
- Saving and retrieving embeddings (the facts) about the persona
- Experimenting with different LLMs to achieve a better performance
- Training the model to mimic the spoken style better
- Identify when to provide additional paid content (images, voice messages)

Stack: Lang-Chain, ChatGPT, LLAMA2, TypeScript, Google Cloud Services, NextJS

Snubes

https://snubes.com/ https://app.snubes.com/

Snubes provides services to assess and track the performance of call centers agents and projects overall using AI.

I've inherited the team with no coding standards or principles. After keeping only the motivated teammates I set up essential agile processes and best practices (CI/CD, code review, git-flow, monitoring) so we could deliver noticeable results

Together with my team, we've

- Set up a phone call transcription pipeline using a modified version of OpenAI's Whisper model (WhisperX)
- Developed another pipeline to analyze transcription produced by Whisper to categorize, flag, and act on them.
- Deployed a hub that received call data from various call center vendors using various techniques. (SFTP, webhooks, pull APIs)
- Built an internal leaderboard for the sales team to track the performance of individual sales managers
- Set up monitoring solutions and CI/CD pipelines for the whole company

Stack: Google Cloud Services, React, Typescript, Python, ChatGPT, Whisper, VertexAI

Before 2013

My career as a software engineer starts on 2008 while I was still staying in the university. I've started my career as a Flash engineer and have developed s significant number of video and audio players and streaming servers. That then led to an offer from SoundCloud in 2012.