Alexander Czigler

CURRICULUM VITAE

PROFESSIONAL EXPERIENCE

Backend Developer & Partner

2013–PRESENT | ITEAM SOLUTIONS

Working at Iteam has been a long journey filled with many exciting projects. I have had the privilege to work with some of the most skilled and intelligent people I have ever met in my life. For each year that has passed I have learned a lot and grown both as a technologist and as a human being.

In most project my role and responsibilities have been those of a developer but there are exceptions. As I am very interested in DevOps and Developer Experience I am usually the one doing the ground work of setting up servers, clusters as well as automating tests and deployments in CD/CD pipelines. In order to learn more and gain perspective of the developer role, I have also worked a bit with UX Research.

Agile, Development, DevOps, DevOps Culture, Mentoring, UX Research

System Developer

2010–2013 | MOGUL

At Mogul I worked full-time as a consultant for TV4, one of Sweden's major media companies.

In my role as a system developer I worked on their sales support system, doing maintenance and developing new features. I was involved in the entire stack from the hosting platform (Windows Server) to the database (SQL Server) and the application backend and frontend (.NET, C#). The sales support system is a vital part of TV4's core business as it is used to manage all of the advertisement sales that make up the bulk of TV4's income. The system integrates tightly with other systems that are used to plan and schedule advertisements in all of the different TV channels as well as on-demand videos (Time-Shifted Viewing). The system also imports viewer statistics that salespeople can look at when talking to their clients during a campaign or after it has finished running.

Development, CI/CD

System Developer

2008–2010 | PDB

At Pdb I mainly worked with Business Intelligence (BI) applications and system development. Working with BI led me learn a lot about databases. I got comfortable working with advanced SQL features and designing data warehouses, I learned about business systems such as SAP, Movex & Lawson M3 and I learned the art of transforming and aggregating data.

A couple of customers that I worked with at Pdb stand out. The first one being Dovado where I got to work with embedded linux for their network routers. That assignment was super fun and taught me a lot about linux and shell scripting. The other customer was iBusiness that had recently lost all of their tech staff during a reconstruction from bankruptcy. It was extremely rewarding to help them get all of their systems in order so they could resume business and start making money again.

Business Intelligence, Development, CI/CD

Freelancer

2004–2013

During these years I worked on a number of smaller assignments. The work ranged from setting up linux & Windows servers to web design and ASP/PHP development.

Development, Linux, Web Design, Windows Server

PROJECTS

Researcher & Technology Specialist
2020–2023 | VINNOVA, LTU, HELSINGBORG STAD

Predictive Movement (PM) and RörLa are research projects that aim to study transport systems in Sweden. I have taken on the role of a versatile team member doing different things at different phases to move these projects forward.

During the first year of PM I focused on planning and coordinating our real-life tests in both Ljusdal and Pajala, while the rest of the team were building a platform for coordinating last mile transports. During each of these tests the team travelled to the location and had a chance to meet people working for the municipality as well as the local transport companies. I planned and performed interviews, user tests and summarised what we learned afterwards.

Later on in the project I switched my focus to working on the code behind the system as well as the new digital twin that we built at the end of PM and that we are also using in RörLa. In RörLa we are using the digital twin to simulate cars, buses, taxis and trucks that transport people and goods. The simulator is built using RxJs and integrates with OSRM, MapBox, Vroom and Pelias. It also uses real-world data from Lantmäteriet as well as data that companies and municipalities have provided us to make our simulations and predictions as life-like as possible.

I have also done a lot of work on the hosting platform of these systems, setting up and configuring servers and Kubernetes clusters for hosting all of the different components and micro services that make up the PM and Digital Twin ecosystem.

The solutions were built using nodejs, elixir, typescript and rxjs. Other technologies used: using Open Street Map, Mapbox, Figma, Telegram.

UX Research, Research, Digital Twin, Typescript, NodeJS, RXJS, Kubernetes, Interview Technique, OSRM

Cryptography Consultant
2022 | UNDISCLOSED

I worked for a client that offers a white label SaaS used for medical consultations. One of their clients (in a different country than Sweden) needs the software to support true end-to-end encryption (ETEE) in order to comply with local regulations.

My role in this project was to investigate what the actual regulations of that country demand and what would be a viable way of implementing ETEE into the software. At the end of the project I had produced a report detailing a number of different options for implementing ETEE as well as common pitfalls affecting security as well as usability in a project of this type.

System Developer

2020–2022 | UNDISCLOSED

I worked on a web based system that is used by schools around several municipalities in the south west region of Sweden. The system enables teachers and school staff to order and distribute physical school books. During my time in this project I worked on adding functionality for ordering and distributing licenses to digital contents. I worked on integrating with Skolfederation as well as forming a new API standard for handling digital licenses. This API standard is to be used by all major publishing companies in Sweden.

Dotnet Core, Egil, Microsoft .NET, Octopus Deploy, SAML, Skolfederation, SQL Server

UX Researcher

2019–2020 | TRR TRYGGHETSRÅDET

The goal with this project was to help TRR understand their role on the Swedish job market and how they can optimise the way they help unemployed people find a new job.

At this assignment I worked closely with an experienced UX Researcher and Designer who mentored me. She taught me a lot of valuable things about interviewing people, building prototypes, facilitating workshops and of course customer focus in itself.

Together with our team we did a number of workshops in Effect Mapping as well as a Design Sprint. These led to the development of a new prototype for matching unemployed people and their skills with available jobs among companies connected to TRR.

During the development of the prototype and later the web application itself I performed a number of interviews with people working with HR and/or recruitment at different companies all over Sweden. I continuously summarised what I learned from these interviews and presented them to the team so that the team gained a better understanding of their end users and so the product owner could make decisions on what to prioritise.

In addition to the qualitative research I also setup heatmaps and event tracking in Matomo, a self-hosted alternative to Google Analytics.

Design Sprint, Effect Mapping, Interview Technique, User Testing, UX Research

System Developer

2019–2020 | V3VO

I was part of a kanban team that worked blazingly fast and released an MVP of an Android and iOS app in about three months time. The app consisted of an extensive personality test modeled by V3VO. The test assesed a person's personality and leadership style among other things. During my time in the project we began to sketch ideas to expand the app with gamification features beyond the personality test itself.

My role in the team was to design and build the backend API and model the database. I also made sure that the team was able to build and release features in a smooth and efficient manner, setting up automated tests and builds using GitHub and kubernetes. I built a REST API using nodejs and express and using postgres to store persistent data. Authentication was done using Auth0, implementing JWKS in both the backend and frontend.

The technology stack consisted of a REST-ful backend API built in nodejs, using authentication with Auth0 and a PostgreSQL database. GitHub Actions, kubernetes, Digital Ocean.

API, Digital Ocean, Kubernetes, Node.js, PostgreSQL

DevOps Engineer
2019 | JOBTECH DEVELOPMENT

JobTech Development is an innovation branch of the Swedish Public Employment Service. They experiment with new tech, tools and ways of working.

In 2019 I helped JobTech adapt some of their solutions to run inside docker. I also helped them setup and configure automated builds and deployments in their OpenShift environment. All of these things helped their developers spend more time on actually writing code and building features and it made their release procedures safer.

Automation, Developer Experience, Kubernetes, OpenShift

System Developer
2018–2020 | MOTORBRANSCHENS RIKSFÖRBUND

Motorbranschens Riksförbund, MRF, came to us in need of help to maintain and operate their flagship product VIM. VIM is a complex Windows application built with WPF, it relies heavily on integrations with third parties such as CABAS to function. VIM is used daily by car workshops around Sweden to track work time, calculate repair costs, get insurance quotes and bill customers and insurance companies.

My role in the team was to use my .NET experience to help keep the WPF application and its backend WCF services running smoothly. I was also part of the process of designing a replacement for the entire VIM platform.

At the beginning of the redesign process I took part of the UX process as we travelled to a number of car workshops around the Stockholm area. We interviewed people who are experienced with VIM and who use it daily to handle insurance claims and bill their customers, as they repair their customer's cars.

The interview phase then led to a kanban process that lasted several months while we worked on a new web based version of VIM, called VIM 2. We focused on building the features that the real users deemed most important and we worked closely with a UX designer to incorporate usability in the frontends right from the start.

VIM 2 consists of a number of separate microservices built using nodejs and typescript. There is a web frontend, a REST API, integrations with CABAS and Fortnox. I also setup automated builds and tests in GitLab as well as automated deployments to a kubernetes environment orchestrated by AWS EKS.

Technology stack: nodejs, typescript, kubernetes, GitLab, AWS EKS.

API, GitLab, Kubernetes, Legacy, Node.js, Typescript, PostgreSQL, UX Research

Advisor, Agile Mentor
2017–2019 | SEB

I mentored the developers and product owner of a team at SEB who were aiming to use new tech and methodologies to develop a new micro service architecture for one of SEB's business areas. By joining all of their stand-ups, planning sessions as well as pair-programming together with their developers I was able to nudge them in new directions. With time and the help of me and two other coworkers from Iteam the team had gained invaluable insights about their work and the challenges they were facing. They had gained a clear vision of what their MVP release would be like, they had a solid CI/CD pipeline and automated testing in place and they were exploring ways of building feedback loops into their products to be able to learn as much as possible once their MVP would be deployed.

Because of my previous experience using Docker and Docker Swarm, I was also invited to a cross functional team that were rolling out Docker Enterprise at SEB. I joined their weekly meetings as an advisor to help them explore the product and establish the necessary policies to rollout the product and make it possible for different teams all over SEB to be able to use it.

During my time at SEB I had identified a number of pain points in their common ways of working, especially in a developer experience sense. During the last weeks of my assignment I joined yet another team that worked with internal support systems and services. We had a couple of meetings where we discussed (corporate-)cultural and technical difficulties. We produced an interview guide and over the course of a couple of weeks we interviewed a number of developers in different teams. The results from the interviews were used to gain an understanding of how to make developers thrive and ultimately increase the quality and output of all tech teams.

Agile, DevOps Culture, Lean, Mentoring

System Developer
2014–2018 | VIMLA

I built the backend & API that made up the CMS and the bridge between the customer self-service pages and Telenor's backoffice system CDRator. I also built and maintained integrations with payment providers (DIBS, Klarna) as well as the community software Lithium.

During my time at Vimla we moved between technology stacks and payment providers. In the beginning our API and CMS was entirely .NET based and we hosted everything in a Microsoft environment. After a couple of years we saw the need to build up a public API. The API would serve the coming mobile app and function as a platform for third-party developers as well.

The public API was built using Node.js and I setup a docker-based hosting environment for it. Later on we also began migrating the .NET-based website, order workflow, knowledge base and self-service pages to modern html+js applications that all utilised the public API.

As we moved towards a docker and linux based hosting environment we also moved from TFS to using Git and running automated builds and testing in TeamCity.

API, AWS, DIBS, Klarna, Kubernetes, Microsoft .NET, Node.js

System Developer

2016–2017 | REFUGEE TECH

Starting at a hackathon that Refugee Tech held me and a few coworkers created "Competency". The idea of the project is to map the competencies of refugees on their way to or already living in Sweden.

The data is meant to show media, politicians and the Swedish population that refugees have a lot of competence and talent that Sweden should utilise. In conjunction with a job search engine it can also be used to match individuals with available jobs and employers looking for talent.

Thanks to the efforts of me and the team, Competency later evolved into JobSkills

Node.js

System Developer

2015–2017 | TAXI STOCKHOLM

Creation and setup of TSAB's cloud orchestrated Docker environment with Docker cloud and Microsoft Azure.

Development of data mining and market automation applications using node.js to process and transfer data from MySQL and Oracle DB to no-sql databases (RethinkDB and ElasticSearch).

Development of a RESTful API in node.js, integrations with SOAP API:s, Oracle DB and RPC backends.

Docker, Node.js, RethinkDB

System Developer

2014–2015 | POWERFX

Soundation Studio is an online studio for producing music and was originally built using Flash. In the year 2014 Flash was reaching its end-of-life and PowerFX, the owner of Soundation Studio, wanted to rebuild the product using HTML and Javascript.

Myself and two coworkers had a set time-box of roughly 100 hours to start with. We started from a blank Angular project and implemented the basic layout of Soundation Studio. We implemented the play/pause functionality, the possibility to add multiple tracks with some individual sound settings and the ability to browse the audio/effect library as well. To be able to play, mix and transform audio we used a native-client (NaCl) bridge for javascript that communicated with the Soundation Studio backend.

After spending the initial time-box we were confident that rebuilding the studio to a pure web based solution was both possible and viable.

Angular, Chrome App, Google NaCl

System Developer

2010–2013 | TV4

I worked as a developer/tech lead building and maintaining TV4:s sales support system. The system is used by ad salesmen all over Sweden and basically handles the bulk of the network's revenue.

C#, CI/CD, SOAP, SQL Server

System Developer

2008–2010 | GETINGE GROUP

At Getinge I built a number of small Business Intelligence applications that provided intel to decision makers in different parts of their organisation. The BI applications were built using DataSet Vision where I built jobs that downloaded data from Lawson/M3 to SQL Servers and presented aggregated results in various ways.

I also worked on a web based system called Price Manager. Price Manager held information about each of Getinge's products and what component, or part, that each product was made of. The Aftermarket Manager used Price Manager to analyse the rarity and demand of each part and set their prices accordingly and make their spare parts competitive. This project taught me a lot about .NET development, SQL and mainframe databases in general.

C#, Business Intelligence, Data Warehouse, Movex, SQL Server

System Developer

2009 | ELECTROLUX GROUP TREASURY

I worked on a web application built using .NET MVC. A ticketing system used by Electrolux Group Treasury to track and manage all of their IT changes.

C#, MVC

System Developer

2008 | DOVADO

When 3G was a new thing, Dovado were very early offering a network router that supported USB modems. This router enabled customers to connect several computers and devices to a Wi-Fi that in turn shared a single 3G internet connection.

During my time at Dovado I helped them study how different 3G USB dongles behaved when connected to their router. I wrote and optimised the scripts that would detect specific dongles and make them switch to modem mode and connect to the internet.

This project was super fun and taught me a lot about linux, embedded devices and shell scripting.

3G, Bash, Embedded, Networking, Linux, USB