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Work experience

Iconmobile — June 2022 — Present

Director Software Engineering

Projects:
- **Schüco DCS SmartTouch** - leading a team of developers and collaborating with 2 levels of client, for module for door communication and access control. That includes hardware unit + iOS & Android mobile applications + hardware unit for intercommunication unit inside building (2nd par of DoorBell). SIP integration with third party devices.
https://www.alukoenigstahl.at/de/system/produkte/schueco-dcs-smarttouch
- Schueco SmartHome - Project is embedded doorbell unit with intercommunion units, iOS mobile application and Android mobile application.
- Video protocol implementation
- Audio protocol implementation
- SIP implementation
- WebRTC implementation
- Wen Sockets protocol implementation
- Management system of multiple embedded doorbell and intercommunion units
- Permissions management
- Access control management

- **Car Repairs Platform** (Bosch) - **Carmeo** leading a team of developers and collaborating with stakeholders to design platform. Overseeing the development of key features such as appointment booking, price comparison, and quote estimation. I also played a key role in developing tools and resources to help car owners make informed decisions about their vehicle's needs, such as a knowledge base and maintenance schedules.
- **https://www.wasteer.de/** - **WASTEER** enables intuitive analysis and control of waste streams. We digitize waste-specific knowledge. In doing so, we offer the digital tool both to bundle existing knowledge of customers and waste and make it visible, as well as to gain new insights based on process data or sensor technology. We are building the future of waste analysis and steering.
- **https://www.carrier.com/** - **Carrier**
Project is platform for refrigeration units mount sensor equipment and then collecting data and then analysis data from sensors. Data analysis and obtaining knowledge based on the data obtained.
- Build mobile application for controlling stage of refrigeration units

- Help manage refrigeration units
- Distribute tasks among grocery store employees.
- Predict maintenance, plan maintenance works & schedule maintenance workers date & time.
- Realtime monitoring refrigeration units (the whole system of refrigeration units)

My tech skill set:
- Go (Golang)
- Python (FastAPI, Django, Flask, Falcon)
- NodeJS
- AWS more that 75% of AWS services.
- Cloud Architecture
- DevOps
- Docker
- Terraform
- Kubernetes
- Azure
- CI/CD Pipelines
- Auto Deployment

IconMobile Oct 2020 — May 2022

Software Architect

Projects:
https://www.salonlab-server.de/ - Salonlab for Schwarzkopf (Henkel)
The Salonlab Smart Analyzer combines, for the first time, hairdresser expertise with data driven insights to provide a truly personalized consultation.

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Salonlab:
Project is SaaS platform for beauty salons across all over the world. (more than 10 000 salons).
It's including IoS device and iPad app, who work with the backend (written on Go). Is contacting 9 services on the backend, as well as math modelling of analytical data from IoT device sensors, converting it to understandable values and string into DB. Also it contains about 10+ user journeys during salon visits. Each user journey is a combination of different flows and

functionally from each services.
What was developed:
- user functionality
- salons functionality
- business logic of user journey
- math computations for IoT device sensors
- calibration dashboard for all devices (some kind of support system for support department)
- user authentication in one iPAD (multiple user was able to auth in iOS app as different employees)
- structure of project (with layers and folders)
- strong requirements to any new microservices
- migrate to monorepo
- allocated the core and move it to monolithic project.
- covered with unit tests
- covered with integration tests without mocking (this was important)
- improvement of auth system via SAP service (requires to be a GDPR and CCPA depending from region and cross region auth.)
- implementation of better routing for k8s
- fully automated pipeline, from commit up to release.

DeepConvo, Inc **March 2019 — Oct 2020**

Software Architect

Projects:
https://telling.ai/ - AI voice analytics software intended to diagnose and monitor lung diseases. The company leverages artificial intelligence and digital signal processing technology to unlock the information contained in the human voice, enabling enterprises with various applications such as forensics, medical diagnostics, fraud detection, and security. It takes the vocal signatures as data points and use machine learning to find patterns that can match to disease.
https://ahn.telling.ai/ - the same as https://telling.ai/ but this was developed by Allegheny Health Network from South Carolina.

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telling.ai
Telling.ai analyzes voice and breath sounds to assess lung health.
This is SaaS service based on scientific research guys from Stanford but base

in Carnegie Mellon University. The input of this app is raw voice form microphone, than it goes to AI, and as a result we can identify various lung diseases.
what was developed:
- backend API as 3 microservices a. API, user namagement, data collection
- frontend UI VueJS with recorder library (it was rewritten by team)
- research of 10 recorders and made pros and cons table, and than was made a decision to rewrite one of existing for our needs
- work with webworker of different browsers-
- WEB API for mobile browsers.
- solve issues with microphone from Safari for iOS
- solve issues with microphone from Chrome for Android
- implement streaming raw data from devices to AI directly
- build test framework for all project with 99% test coverage
- solve issue with low speed internet connection users
- implement ClickHouse for marketing needs and complexity generated reports for since needs

Burning Buttons Dec 2013 — Oct 2020

Software Architect

Projects:
- http://digitalgenius.com - DigitalGenius is an AI platform that puts your customer support on autopilot by understanding conversations, automating repetitive processes and delighting your customers.
- https://www.dmv.com - is a privately-owned website and is not affiliated with government agencies.
- https://mealz.com/ - Mealz is a cooking platform that features premium recipes from top chefs, bloggers and nutritionists.Our beautiful website allows culinary experts to share their recipes and meal plans, and health conscious users - to discover them with ease.

My tech skill set:
- Go (Golang)
- Python
- NodeJS
- Docker
- AWS more that 75% of AWS services.
- CI/CD Pipelines
- Auto Deployment
- TensorFlow
- Scikit Learn
- Machine Learning

I worked as a DevOps (build infrastructure for AI highload application) with stack:
- nodejs
- python
- aws (terraform)
and many more things at this project.

DigitalGenius:

Feb 2018 - November 2019

I've done with AI startup for customer support.
We had 5000+ Lambdas, over 70 EC2, 18 Clusters, and other related aws services.
Fully automated pipeline, from commit up to release.
Every service was designed according to the philosophy of microservices.
We've also had CI/CD fully dockerized.

DMV:
20011 - 2018

Project has a huge network of services throughout United State of America, starting from the driving schools that the company bought from Hawaii to New York. It also include such services as:

1. Drivers License
2. Driving Records
3. Auto Insurance
4. Traffic School
5. Practice Tests
6. Vehicle Registration
7. Drivers Education
8. Bill Of Sale
9. Traffic Tickets
10. DUI / DWI
11. New/Used Cars
12. DMV Locations

I've started this project along with CEO of dmv. But than it growth up to a huge company of hundreds of people.

I was started project from scratch, and everything was made by me + frontend developer and designer. And than projects was sold to OnpointGlobal company based in Miami.

what was done:
- scraped all DMV offices from all country (this was very complicated task)
- developer marketplace of different types of products
- implement API for affiliate companies
- implement Vehicle Registration API for some DMVs in US
- implement online Traffic Schools portal (but when OnpointGlobal bought project we just started to buy Traffic Schools from different states and automate that process)
- implement API for Driving Records, Car Check, DUI / DWI
- it was build knowledge base
- 19000 pages of information
- 70000 drivers helped daily
- 50000 Driving records Fulfilled
- 20000 Questions Answered Monthly
- it was bare metal cloud it was managed by me, but that we moved to AWS b/c of traffic was incredible, especially we publish AD by US TV.

Mealz
Mealz - is a recipe platform that empowers people to discover and share recipes, create virtual collections and plan meals.

what was done:
- AWS infrastructure with dev QA and PROD envs
- isolated multiregional tenants for different affiliate customers
- CI/CD pipelines based on dockerized microservices
- Cost optimisation for AWS infra
- AWS security compliance

Starately LLC — Feb 2007 — Dec 2013

Full Stack Web Developer

My skill set:
- Go (Golang)
- Python
- Django
- Flask
- Scikit-Learn
- AngularJS
- Docker
- Microservices
- MongoDB
- RethinkDB
- PHP
- Drupal
- JS
- AWS
- NodeJS
- Elastic Search SphinxSearch
- Postgresql, MySQL
- Mesos
- Marathon

Development Mill — Feb 2007 — Apr 2009

Web Developer

- PHP
- Drupal
- C/C++
- JS
- AngularJS
- Elastic Search SphinxSearch
- Postgresql, MySQL
- exim4
- Linux (debian / ubuntu / centos / red hat)
- MS Active Directory

Projects:

DMV.com
from: 2011 to: 2018

Project performance:
- 1400 users per second
- around 42000 RPS
- AWS

DMV WP600
from: Jan 2018 to: Aug 2018

We had 600 "premium" domains like cuba.com, atlanta.com e.t.c
We have high traffic for these domains. I had to build system to handle all of this.

Project performance:
- 100 EC2 per 600 projects
- up to 300 EC2 peak server load

IAM Microservice

language: Golang

Description: Cloud native IAM integration platform.

Perseus IAM the world's first IAM Microservices-driven platform. Our platform deploys within any existing deployment model, including on-premise, cloud, or hybrid – giving you a flexible and cost savings approach to modernizing your cyber security infrastructure. Perseus IAM provides a real time approach to ensuring data quality. This allows organizations to take a systematic and modern approach to addressing data quality issues as it pertains to IAM/IGA implementations.

http://www.gooddoglabs.com/

Geolocation short messenger

Language: Golang

Description: system analog twitter, but you can subscribe to Geo object like street, building, or square.
The idea was, that you can get "twits" from your street, or from your neighborhood.

Fingerprint

Language: Ruby + Python

Description: identyfy users by browser fingerprint with a specific algorithms.

Links

https://github.com/qwertmax
https://stackoverflow.com/users/661378/qwertmax
https://angel.co/qwertmax

Certificates

AWS certified architect

Qualifications

Management Stack

- manage people of 20 developers in 5 teams simultaneously.

Tech Stack (languages)

- Go (Golang)
- Python
- DevOps
- CI/CD pipelines (github, gitlab, AWS)
- AWS 75% of services in AWS
- GCP
- Python - Django, Flask
- ML (numpy scipy scikit-learn pandas)
- Terraform
- Cloudformation
- SQL
- Rust
- C/C++
- Bash
- HCL (HashiCorp Configuration Language)
- JavaScript
- C/C++
- PHP
- Docker
- NodeJS
- VueJS
- ReactJS

Tech Stack (technologies)

- Cloud Solution Architecture
- Infrastructure Solution Architecture

- DevOps
- Cloud orchestration
- Cloud strategy
- AWS
- GCP
- Azure
- Open Stack
- Docker
- K8S (Kubernetes)
- NPM
- Microservices Architecture
- PostgreSQL
- MySQL
- MongoDB
- DynamoDB
- ClickHouse
- ETL
- Database Management
- Data Warehousing
- Data Architecture
- Networking
- Automation
- Pipelines
- CI/CD
- Autotests
- Containerisation
- Performance testing
- Metrics and Analytics
- Authentication management
- Authorization management
- Cost and workload management
- Change management
- Configuration management
- Serverless
- Infrastructure as code
- Multi-cloud

Education

Bachelor of Computer Science — Sep 2003 — Jul 2007

Omsk State Technical University

Master of Computer Science — Sept 2007 — Jul 2009

Omsk State Technical University

My scientific work was **Fault Tolerant Systems**.

As part of the master's program, I was engaged in research in next directions:

- neural networks
- code quality metrics
- multithreaded system level programming

References

AWS certified solutions architect

https://udemy-certificate.s3.amazonaws.com/image/UC-DWJPD2Q3.jpg