Dima Kurilo - Senior Software Engineer

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## Senior Software Engineer

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GitHub profile: <https://github.com/DKurilo/>  
StackOverflow profile: <https://stackoverflow.com/users/1578857/dima-kurilo>  
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HackerRank profile: <https://www.hackerrank.com/dkurilo>

## *I can:*

|  |  |
| --- | --- |
| **JavaScript** / **TypeScript** / **node.js** **fp-ts** / **io-ts** / **Rambda** / **sanctuary** **Terraform** / **Kubernetes** / **Helm** / **Serverless** **CircleCI** / **GitHub** / **TravisCI** / **Jenkins** **Docker** **AWS (CloudFormation, ECS, EKS, EC2, Lambdas and other)** **ElasticSearch** / **OpenSearch** | **Haskell** **GraphQL** / **Apollo GraphQL server** **MySQL** / **MongoDB** / **BigQuery** / **DynamoDB** **Google Cloud Platform** **some experience with Kafka** **number of other programming languages** **prefer functional programming approach** |

## *Professional Experience*

#### Senior Full Stack Developer

12/2021 - now  
Qualio, [<https://qualio.com/>]

*Responsibilities*

* Create and maintain services that allow users to search for information
* Create and maintain services to notify users
* Help other teams to build back-end and front-end services

*Tech Stack*

* JavaScript / TypeScript / Node.js
* React / Angular and so on
* python / SQLAlchemy
* AWS: AWS-CDK, CloudFormation, ECS, Lambda, EC2, etc
* Postgres
* OpenSearch/ElasticSearch
* Redis
* CircleCI / GitHub / Jira / Confluence
* Docker and so on for development and production
* Hexagonal architecture / Clean architecture

*Achievements (only highlights)*

* Developed systems using TypeScript, JavaScript, Python, React, and SQLAlchemy, implementing hexagonal/clean architecture principles.
* Built CI/CD pipelines, development tools, and infrastructure as code predominantly using AWS-CDK (CloudFormation).
* Notable projects include:
  + **index-management-api**: Inspired by Terraform, it manages ElasticSearch/OpenSearch indices, templates, pipelines, and aliases. Implemented in TypeScript, it serves as both a console application and a web service, facilitating integration into CI/CD pipelines.
  + **QRI service**: Standardized entities' addresses, enhancing company service connectivity. Utilized Redis for caching user and entity information.
  + **Global Search service**: Developed a smart wrapper around OpenSearch for seamless entity searches.
* Unified all developed services within a monorepo, leveraging AWS-CDK for provisioning and deployment. Implemented a sophisticated CircleCI CI/CD pipeline that intelligently detects and processes only modified projects. Utilized TypeScript across the stack, enabling streamlined management of subprojects with `[npm workspaces](https://docs.npmjs.com/cli/v10/using-npm/workspaces)` and consistent tooling (eslint, jest) throughout the monorepo.

#### Senior Software Engineer / Backend Engineer

03/2020 - 12/2021  
Patch.com, New York, [<https://patch.com/>]

*Responsibilities*

* AuthN/AuthZ platform
* system architecture development
* CI/CD development (CircleCI)
* DevOps: configuring systems with Terraform, Kubernetes (AWS EKS), docker, Helm
* Dev tools development
* Legacy system support

*Tech Stack*

* JavaScript / TypeScript / Node.js
* fp-ts / io-ts
* AWS: Lambda, EC2, EKS, etc
* gremlin
* AWS Neptune
* Fastly
* Auth0
* Serverless
* MySQL / MongoDB / BigQuery / DynamoDB
* Terraform / Kubernetes / Helm / docker / packer
* CircleCI / GitHub / Jira / Confluence
* Google Cloud Platform: BigQuery, Functions, Pub/Sub, etc
* Haskell for dev tools

*Achievements*

* Build system to manage inner structure of editorial team
* Designed and implemented AutN/AuthZ scalable platform (different identity providers, attribute-based access control)
* described part of infrastructure in Terraform
* started EKS k8s, built Helm charts for some services and set up CI/CD
* developed and set up Data Warehouse (GCP BigQuery based) load system
* developed DSL to generate content feeds for newsletters from different sources

#### Senior Web Engineer

12/2017 to 01/2020  
Future PLC / Purch, New York, [<https://www.futureplc.com/>]

*Responsibilities*

* migrating the sites of acquired companies into the corporate publishing platform
* developing and maintaining the corporate publishing platform

*Achievements*

* implemented a Go package that provides EDSL (embedded domain specific language) for describing composition of HTML transformations. As a result, the package allows to make any complex transformation using just a few lines of code
* created a Haskell-based set of tools that allows to make complex changes in huge amount of large json files through API.
* implemented a set of GraphQL directives that allows to remove resolvers and describe GraphQL schemas in a declarative way.
* implemented a complex cross-platform feature that allows the company to use a better SEO strategy. During the implementation updated components written in Go, JavaScript, TypeScript, PHP
* maintaining and developing existing and participating in development of new high-load projects, such as [www.space.com](https://www.space.com/) and [www.tomsguide.com](https://www.tomsguide.com/)

#### Lead Web Developer

05/2014 to 10/2017  
Creative Soldier, Brooklyn, [<http://creativesoldier.com/>]

*Responsibilities*

* full-stack development: creating, deploying and maintaining web sites and applications starting from layouts, implementing responsive design principles in various browsers and on desktop and mobile devices
* providing technical solutions and resource estimates to the management based on clients’ requirements

*Achievements*  
Developed and launched 30+ projects, including

* The Duchess [<https://duchessapartments.com/>] (AngularJS + MODX)

## *Education*

**Moscow Engineering Physics Institute (MEPhI), Moscow, Russia**  
Engineer-physicist (MS equivalent degree), Electronics and Automation