Dima Kurilo

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

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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 and www.tomsguide.com

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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