

# Alexander Alekseichuk

*Backend Developer - Node.js/Nest.js*

*Work Experience: 10+ years*

*English Upper Intermediate*

*Saint-Petersburg, Russia, GMT+3*

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## Summary

System Architect and Developer. Design and implement solutions on JS/TS. Use client and server side frameworks and libraries. Microservices connected via RabbitMQ/Kafka. SQL and NoSQL databases. Organize team work by scrum/kanban and git-flow. As DevOps CI/CD dockerized solutions into AWS cloud by Gitlab.

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## Key skills

- JavaScript/TypeScript
- node.js
- nest.js, express, koa, fastify
- typeOrm, sequalize, mikroOrm, prisma
- postgresql, mysql, mongodb, redis, clickhouse
- react, next.js, react-query
- REST, WebSocket, TCP/IP
- git, docker, gitlab CI, AWS
- UML, Patterns

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## WORK EXPERIENCE

### **PearlX.com**

<https://pearlx.com>

2022.05 - present

Green Energy for communities

Tasks:

- HTTP API for secure access to VPP data
- Document management system for VPP members on-boarding

Results:

- Designed, implemented full-stack, then CI and deploy to AWS
- +1 developer in the team

Technologies: JavaScript, node.js, express, sequelize, postgresql, react, next.js, react-query, HTML, CSS, Tailwind, docker, AWS, ECS, S3, CloudFormation

## **Sygnum AG**

<https://www.sygnum.com>

2021.06 - 2022.05

R&D of the Bank: Microservices to handle high-load traffic of financial information

Tasks:

- Implement microservices and help devops to deploy them to AWS
- Help other teammates and departments with mTLS and cryptography

Results:

- A set of microservices able to receive high-load traffic of source info
- Process and provide in terms of requests of other services and 3-rd party systems
- Introduced mTLS for internal and external flows

Technologies: TypeScript, node.js, nest.js, kafka, DynamoDB, docker, AWS, SNS/SQS, ECS, Terraform, ancient bank protocols

## **Hackathon**

<https://github.com/alex-alekseichuk/hackathon-front>

2020

Platform to move the communications and marketing features of the events to online format, in terms of Covid'19.

Tasks:

- Design and implement a platform for remote activities online
- Implement User Web UI as nuxt application
- Use vue framework
- Use vuex for the state on client side

Results:

- Stable prototype for a demo

Technologies: JavaScript, vue, vuex, nuxt, vietify

## **Tymlez**

<https://www.tymlez.com>  
2016.05 - 2021.06

Applications on Blockchain and Smart Contracts. Green Energy.

Tasks:

- Design and implement proprietary blockchain and smart contracts
- Design and implement full stack applications based on this blockchain platform or Ethereum
- Lead other developers
- Code review
- Technical interview of candidates

Results:

- Designed and implemented decentralized authentication/authorization and wallet/keys management in proprietary blockchain system
- Designed and implemented decentralized secured document management system based on the platform
- Help CTO to build pro-active culture in development team
- Help CTO to forward the startup to IPO

Technologies: JavaScript/TypeScript, node.js, express, loopback, nest.js, mongodb, rethinkdb, postgresql, docker, react, next.js, HTML, CSS

## **Toptal**

<https://toptal.com>  
2015.02 - 2016.05

Work as freelancer via Toptal agency under outstaff schema

Tasks:

- Implement, fix, re-design, re-implement on back-end and/or front-end

Results:

- A lot of happy Toptal clients

Technologies: JavaScript/TypeScript, node.js, express, mongodb, postgresql, mysql, react, redux, angular, .NET C#, ASPX, EF, Python, Django, Flask, SQLAlchemy, Alembic, Java, Spring, Oracle, ActiveMQ, WebSocket, HTML, CSS

## **Plarium**

<http://plarium.com>  
2010.11 - 2015.02

Create multiplayer online games in social networks with high-load traffic

Tasks:

- Design and implement full stack high-load systems for mid-core games
- Drives project as a whole process
- Supervise work of front-end and back-end teams

Results:

- Multiplayer games support high-load traffic of a lot of users in social networks

Technologies: JavaScript, node.js, meteor.js, .NET, C#, Ruby, rails, mysql, MSSQL, Java, Android SDK, iOS, xCode, Objective-C

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## EDUCATION

### Specialist (honours degree)

### Specialization in Mathematics and Computer Science | Simferopol State University

Studied Mathematics and Programming: 3D graphics, Databases, Client-Server solutions, UNIX. Teaching children programming in the school.

### September 1994 - June 1999

#### Additional courses and certificates

- 'SAAS' based on ruby and RoR with TDD and BDD (Armando Fox and David Patterson from UC Berkley) 2012
- 'Cryptography part 1' with distinction (Dan Boneh from Stanford) 2012
- 'Machine Learning' (Andrew Ng from Stanford) 2012
- 'Scala & Functional Programming' with distinction (Martin Odersky) 2012
- 'MongoDB Developer' (10gen) 2012
- 'MongoDB DBA' (10gen) 2012
- 'Digital Signal Processing' (Ecole Polytechnique Federale de Lausanne) 2013
- 'The Hardware/Software Interface' (University of Washington) 2013
- 'Introduction to Data Science' (University of Washington) 2013
- 'Creative Programming for Digital Media & Mobile Apps' (the University of London) 2013
- 'Computer Networks' (University of Washington) 2013
- 'C Programmer' cert. by TekMetrics (BrainBench) 03.1999