Alexandru Olaru

Senior Backend Software Engineer / Engineering Manager

Based in Chişinău, Moldova

Senior Backend Software Engineer and Engineering Manager with 12+ years in the industry, specializing in building scalable distributed backend systems and leading high-performing development teams.

Contact & Online Presence

Contact	Online Presence	
■ alxolr@gmail.com +373 69 85 20 50	 ⇒ alxolr.com ⇒ linkedin ⋄ github ⇒ youtube ■ stackoverflow ⇒ twitter x 	

Skills

Tech stack	Data stores	Cloud Services	Speaking Languages
 Javascript/Typescript Express FeathersJs NestJs Rust Axum Tokio PHP Symfony Magento 	MySQLPostgreSQLMongoDBRedis	 AWS Lambda SQS S3 Redshift 	 Romanian (Native) Russian (Fluent) English (Fluent) French (Proficient)
Work Experience			

AWWCOR, INC. (Remote)

Jul 2018 - now (7 years 3 months)

Working for a US-based B2B SaaS company as a contractor through AWWCOR. The company provides software solutions for the clinical research industry. The platform helps big pharmaceutical companies to streamline their clinical trials, manage their data and ensure compliance with FDA regulations.

Technologies: Node.js (Express, Nest.js), TypeScript, MySQL/PostgreSQL, Lambda, SQS, S3, Redshift, Redis.

Positions

- Senior Backend Engineer/Node Architect Nov 2023 now
 - Moved to architecture team in the company, working on various projects to improve the overall architecture performance of the platform.
 - Improved and optimized various backend services, focusing on performance mainly using Rust for high cpu tasks.
 - Improved the performance of the Batch processing system for some jobs up to 10x
 - decoupled the entire job progress, from tracking each individual response, reduced the number of db read/writes from hundred of thousands to few hundreds.
 - used grouping and bulk processing for various steps in the pipeline which increased the throughput significantly.
 - Developed the backend part of a desktop application, something similar to github desktop, integrated with our platform. Used by clinical researchers to manage/sync their projects from local environments to the cloud.
 - Technologies: Backend Rust, tokio, tauri, Frontend Angular.
- Software Team Lead/Engineering Manager Oct 2019 Oct 2023 (4 Years)
 - Was leading two teams a total of 13 engineers.
 - My initial team of 4 people the Batch processing system.
 - The second team a classical **UI/API** team that rapidly grew to 9 people in less than a year.
 - A Metadata Store which handled various clinical standards like CDISC
 ODM. A vital service for the entire platform, one of the most used service in the company.
 - Technologies: Node.js (Express, Nest.js), TypeScript, MySQL, Lambda,
 SQS, S3, Redis, frontend Angular, bootstrap, ngrx.
 - The Metadata team was rebuild from scratch, and I was heavily involved in the hiring process, interviewing and selecting the right candidates.
- Senior Backend Software Engineer Jul 2018 Sep 2019 (1 Year 1 Month) Technologies: Node.js (Express), TypeScript, MySQL, AWS Lambda, SQS, S3, Redis.

- Designed and developed a distributed **Batch processing system** for handling large volumes of clinical trial data efficiently.
 - Handle GBs of data files for tens of thousands of subjects, processing them in parallel across multiple AWS Lambda functions.
- The system used a microservices architecture, with services/lambdas communicating via SQS queues.

Pentalog, S.A. (Moldova, Chisinau)

Dec 2012 - Aug 2018 (5 years 8 months)

Full stack developer *Dec 2012 – Aug 2018* Worked on various projects for international clients, mainly in e-commerce and web applications. Technologies used: PHP (Symfony, Magento), JavaScript (jQuery, Angular), MySQL, HTML/CSS, MongoDB and MySQL.

Projects

- Backend system and Application creation and management for a startup that uses NFC technology to enhance the user experience in events and venues *Technologies*: Node.js (Express/feathers.js), MongoDb/MySQL, JavaScript/Typescript (Angular), HTML/CSS, WebSockets.
 - Developed a backend system for events and venue management using NFC tags.
 - Created an application for users to interact with NFC tags and access event information.
 - Created the admin panel for application management
 - Supported real-time updates and notifications using WebSockets.
- Backend system for real estate journal publisher in France *Technologies*: PHP (Symfony 2), MongoDb 3, JavaScript (jQuery), HTML/CSS.
 - Developed a backend system for managing real estate listings, articles.
- E-commerce platform for children fashion designer in France *Technologies*: PHP (Magento 1), MySQL, JavaScript (jQuery), HTML/CSS.
 - Developed a custom e-commerce platform using Magento.
 - Implemented features such as product catalog, shopping cart, checkout process, and payment integration.
 - Optimized website performance and SEO.

Education

Sep 2009 - Jun 2013 Technical University of Moldova, Chisinau.

• Bachelor of Science in Information Technologies, Faculty of Computers, Informatics and Microelectronics

Certifications

- JSNSD: OpenJS Node.js Services Developer
- JSNAD: OpenJS Node.js Application Developer