ANDRII MELNYCHUK

Senior Full Stack Software Engineer
Lviv, Ukraine | LinkenIn

Summary

Full stack software engineer with over 10 years of experience in software development. Specialized in building scalable web, mobile, desktop and console applications using JavaScript, Node.js, React, React Native. Skilled in cloud services (AWS, GCP), refactoring and redesigning of legacy software, splitting monolith into micro-services. Have experience in technical interviewing, team leadership and mentoring.

Key skills

- **Programming languages**: JavaScript, TypeScript;
- **Frameworks & libraries**: Node.js, React, React Native, Nest.js, Express.js;
- **Databases**: MySql, PostgreSQL, MongoDB, DynamoDB;
- **API**: REST, GraphQL;
- **Infrastructure**: docker, docker-compose, aws cdk, CI/CD (atlassian bamboo, circleCI, gitlab, github actions);
- **Clouds**: AWS (lambda/step function, RDS, Secret Manager, SQS, cdk, DynamoDB, API Gateway), GCP (BigQuery);
- **Version control**: git (GitHub, GitLab, Bitbucket);
- **Other**: RabitMQ, Redis, jest, mocha, chai, sinon, eleventy, contentful.

Professional experience

- **Senior full stack JavaScript Developer** | *Ciklum – L'viv, Ukraine | September 2021 – Present*

  - Migrated micro-services and their dependencies to the latest version of Node.js that brought new features, performance and security improvements, bug fixes. Decommissioned old libraries and frameworks that aren't supported any more.
  - Migrated part of micro-services written on Python to Node.js that allowed teams to use single programming language, unify technology stack, frameworks and libraries, approach to software testing, deployment, dependency management and updates, documentation generation.
  - Redesigned legacy micro-services written on old node.js callback approach to use promises, async/await, rx.js, Nest.js. It allowed to use the same framework, project structure, approach to testing, deployment and API documentation generation for all the micro-services.
  - All new code covered by unit and integration tests with coverage of 80+ percent.
  - Automated API documentation generation for the clients of our services.
  - Built CLI tool to automatically migrate existing static site pages from old to a new CMS.
  - Built and documented process of code review, code style, deployment, rollback to prior version in case of fail, logging and monitoring etc.

- **FullStack Node.js, React, React Native engineer** | *Lohika Capgemini – L'viv, Ukraine | October 2020 – September 2021*

  - Redesigned workflow to apply for a job on staffing platform that allowed to get the same look and feel for both web and mobile version of the feature, step away from old and unsupported libraries and frameworks, improve security, performance, code quality.
  - Implemented GraphQL BFF that allowed to reduce amount of data sent to mobile version of the feature, hide complexity and limitations of legacy micro-services, moved data composition from front-end to back-end, business logic moved from client to server keeping the code in one place, making web and mobile app more lightweight and less error prove because of deviations between data composition and API called on clients.
  - Implemented mobile version of the feature to reach clients on mobile platforms (smartphones, tablets etc.).

- **Node.js backend engineer** | *Binariks Inc. – L'viv, Ukraine | June 2020 – October 2020*

- Built server-less application to collect data from wearable medical devices allowing hospitals, clinics and insurance companies to provide better services for their patients or client.
- Built service for data ingestion from third party API to improve patient's medical record, health monitoring and alerting of GP and insurance company in case of deviation from normal health conditions.

- **Node.js backend engineer |** *Lohika Altran – L'viv, Ukraine | October 2018 – June 2020*

  - Redesigned monolith application into micro-services (REST API) that allows to develop and scale each service separately from each other, use databases that better suite for storing and handling data of certain service. New services became more lightweight, easier to understand, faster to develop, test, deploy.
  - Setup docker development environment so new developers don't have to spend so much time on learning complexity of the system and can become productive and efficient faster. Reduced time for setup of local development environment from 3 weeks to couple of hours.
  - Increased code coverage from 40% to 90%.

- **Software Engineer** | *N-iX – L'viv, Ukraine | May 2017 – May 2018*

  - Redesigned set of monolith web sites into micro-services. Extracting common functionality as authorization and authentication into its own service (REST API) allowed to get single and central place for identity and access management allowing SSO and single source of true. Smaller features has been extracted into node.js libraries to ensure code reuse and reduce duplication of code and bug fixes of same function in different places.
  - Increased code coverage to 95%.

- **Web/UI developer (PHP/JS)** | *Intellias – L'viv, Ukraine | February 2016 – May 2017*

  - Implemented new work resource planning module within existing application suite. Extending our suite that our clients have been already using for years allowed to eliminate necessity in third party software and implementation of custom data synchronization interfaces for incompatible applications.
  - Archived 90% code coverage.

- **EAI Developer (Delphi/PHP)** | *Intellias – L'viv, Ukraine | March 2014 – February 2016*

  - Implemented SOAP data exchange API (PHP) to import/export information from our application suite into third party applications. The automation allowed to keep two incompatible systems in sync eliminating manual data input from users.
  - Implemented Window Service (Delphi) for database synchronization. Allowed to do data synchronization by configured schedule.
  - Developed custom themes for web portal to meet customer's corporate design.
  - Integration of third party solutions into our web portal.

Education

- **Master's Degree in Computer Science**
  Ivan Puluj National Technical University - Ternopil, Ukraine
  2010 – 2011
- **Bachelor's Degree in Computer Science**
  Ivan Puluj National Technical University - Ternopil, Ukraine
  2005-2007

Certificates

- **Cyber Security: From Beginner to Expert** | *Udemy | 2024*
- **Ultimate AWS Certified Solution Architect Associate** | *Udemy | 2022*
- **Learn React by building and deploying production ready app** | *Udemy | 2018*
- **M101JS: MongoDB for Node.js Developers** | *Udemy | 2017*

Languages

- Ukrainian (Native);
- English (B2, Upper-Intermediate).

Projects

- **Sensa Investigation Hub** | Ciklum | [SymphonyAI](#)
  The financial crime investigation platform. Uses capabilities of generative AI to drive faster, more consistent AML investigations. Consolidate risk detection across AML, KYC/CDD, sanctions screening and payment fraud for a single, subject-centric view for investigations. Arm every investigator with a generative AI-powered assistant that can source, analyze, and summarize data at scale in seconds.

  Tools and technologies: JavaScript ES6/TypeScript, Node.js, React, Nest.js, Azure, Copilot AI.

- **Product cards MFE** | Ciklum | [TUI](#)
  Product cards micro front-end is located on the TUI's main holiday booking web site and allows to provide list of hotels matching search criterion.

  Tools and technologies: JavaScript ES6/TypeScript, Node.js, AWS, cdk, eleventy, SSG.

- **Cloud-based retail management solutions** | Ciklum | [Trax retail](#)
  The platform allows clients to capture images of products in stores from a variety of sources and then analyze photos down to the pixel level. Object-recognition and placement-detection engines extract data from images with industry-leading accuracy. Business-intelligence algorithms combine image data with sales and strategy data to provide deep insights on KPIs that matter most to the customer. Harness computer vision, deep learning, and artificial intelligence to sell more in stores.

  Tools and technologies: JavaScript ES6/TypeScript, Node.js, Express.js, Nest.js, AngularJS, Angular, AWS, GCP, Event-driven architecture, Jest, docker, Jenkins, Git, MySQL, MongoDB, OpenAPI.

- **Staffing platform** | Lohika Capgemini | [Bluecrew](#)
  Bluecrew is the first hourly workforce-as-a-service provider combining W-2 labor, a workforce management platform, and data + analytics for workplaces who have hourly workers and fluctuating demand.

  Tools and technologies: JavaScript ES6/TypeScript, React, React Native, Apollo client and server, BaseWeb, React Hook Form, Redux.

- **Server-less solution for insurance company** | Binariks Inc.
  Primary care provider exclusively serving Medicare patients.

  Tools and technologies: Node.js, TypeScript, serverless framework, AWS S3, Lambda/Step functions.

- **Zume Pizza, pizza made by robots** | Lohika Altran | Zume Pizza
  Automated production and delivery of pizza, which would largely be made by robots and cooked en route to customers. The platform also included algorithms to predict customer choices, and planned to partner with businesses to provide other robot-prepared meal components, such as salads and desserts.

  Tools and technologies: Node.js, Express, JavaScript, PostgreSQL, Redis, RabbitMQ, Angular.js, Vue.js, Mocha, Chai, Sinon, Jenkins, Heroku, docker, docker-compose.

- **On-Track Cost Management Application** | N-iX
  Solution for procurement and supply chain consultancy. Help organizations reduce costs, improve internal processes and up-skill their procurement teams so that they can realize cost savings faster.

  Tools and technologies: PHP5, JavaScript, JQuery, MySQL, HTML, CSS, SASS, PHPUnit, Codeception, Apache, Docker, Docker-compose.

- **MCS Scheduler** | Intellias
Resource planning and task management system. Task scheduling as a reaction to an incident or planned maintenance that simplifies work and material resource planning. Multi-view scheduling boards with rich filtering capabilities, access control, skill matching and validation to find best executor for a task based on working/non-working time and worker's timetable.

  Tools and technologies: PHP5, JavaScript, Oracle, PL/SQL, Sencha ExtJs, Zend Framework, HTML, CSS, Jasmine, PHPUnit.

- **Web portal for contract and property management** | Intellias

  Tools and technologies: PHP5, JavaScript, Oracle, PL/SQL, Sencha ExtJs, Zend Framework, HTML, CSS, Jasmine, PHPUnit.