#### **Experience:**

# Expert Backend Developer at Nuant 04/2022 - Present

I am responsible for developing and maintaining microservices using Nest.js and web3.

**Project:** Data provider from different blockchains

Tech Stack: Node.js, Typescript, NestJS, Docker, PostgreSQL (TimescaleDB), Redis,

MongoDB, Web3, Kubernetes, Kafka, GraphQL

Responsibility: I developed microservices architecture for this project in a team of 4

backend members using NestJS.

I have implemented a custom JSON RPC calls for web3.

I have implemented a custom API Gateway for fetching blockchain data (like blocks, transactions, traces, logs etc) with hot/cold cache layers using Redis and MongoDB.

I have implemented real-time updates using WebSocket-like subscription mechanism.

I have implemented a microservice for fetching data from DeFi protocols (using job queue) and calculating analytics for users from this data.

I have implemented a payment microservice that supports Stripe, Coinbase, BitPay payment methods.

## Senior/TL Backend at opinov8 09/2019 – 04/2022

Was responsible for developing, maintaining, code and design reviews, mentoring and creating solutions from scratch.

For example creating microservice for authorization, developing from scratch and presenting it to the client.

Project: Under NDA

**Tech Stack:** Node.js, Typescript, NestJS, Docker, MySQL, Redis, RabbitMQ, WebSocket **Responsibility:** I developed domain-oriented microservices architecture for this project in a team of 7 backend members, using NestJS built-in microservices support (transports HTTP, RabbitMQ, WebSocket).

I created data models and optimized performance using typeorm (for example simplify legacy relationships between data models).

Design and code reviews.

Mentoring Middle/Junior devs.

Implement 2FA mechanism using nodemailer.

Implement some AWS (S3, RDS(postgres), SNS) integrations.

Implement demo-mode for new users.

Implement payment integration with Stripe.

Implement real-time support for users.

Implement a real-time tracking system using Google Maps.

Implement caching mechanism using Redis.

Implement asynchronous global system updates/events using RabbitMQ (fanout exchange) Implement other non-complex features.

**Project:** Under NDA

Tech Stack: Node.js, AWS Lambda, API Gateway, SNS, SQS, Contentful, Cloudinary, Slack

API

**Responsibility:** I developed serverless architecture for this project.

I used lambda functions, map them into API Gateway and implement business logic in functions.

Implement integrations with Contentful and Cloudinary.

Implement Slack/SMS/Email notifications.

For example users can export CSV files with some filtered data or large images/videos with SMS/Email notification when it will be done.

**Project:** Under NDA

Tech Stack: Node.js, Typescript, AWS CDK

**Responsibility:** I developed a serverless infrastructure for this project using AWS CDK. I used such services as Lambda, API Gateway, SQS, SNS, DynamoDB, Cloudformation, Cognito, Amplify.

Create core and nested stacks of application, then these stacks were synthesized into CloudFormation template and deployed to the AWS.

I used Lambda functions and API Gateway for business logic.

Implement authorization mechanism.

In-app and push notifications using Expo

Project demo presentations to the client.

Project: Under NDA

Tech Stack: Node.js, Typescript, Loopback4, PostgreSQL, Docker, Nginx, AWS Transcribe,

WebRTC, WebSocket(socket.io)

Responsibility: I developed a service using Loopback4 for different client extensions.

Implement automatic speech recognition extension using AWS Transcribe.

Implement CRUD extensions for admin panel, and enable/disable them for users.

Implement video calls using WebRTC and Websocket signalling server for it.

We implemented it using AWS Transcribe in run-time with delay ~1 second.

Project demo presentations to the client.

**Project:** Under NDA

Tech Stack: Node.js, Typescript, Nest.js, Fastify, PostgreSQL, RabbitMQ, Docker, Redis,

Feathersjs, EOS blockchain, Python3, aiohttp

Responsibility: I developed domain-oriented microservices architecture for this project

using Nest.js built-in microservices.

Implement input and output EOS transaction sign/verify mechanism using EOS API.

Implement NFT tokens (user assets) creation, burning using EOS API.

Implement Redis caching.

Implement daily treasures/rewards mechanism for users.

Implement admin panel.

Implement support desk.

Implement other core features.

# Senior Backend Developer at CHI Software 01/2021 – 07/2021

01/2021

**Project:** Under NDA

Tech Stack: Node.js, TypeScript, Nest.js, Microsoft Azure Services, Redis, UPC for

payments

**Responsibility:** I developed microservices and implemented integrations between them.

Implement caching mechanism using Redis.

Store data in Azure CosmosDB.

Implement request/response sign/verify operations between microservices and user encrypt/decrypt operations using Azure Key Vault.

Implement Saga(orchestrator) pattern between microservices.

Implement asynchronous messaging using Azure Service Bus (implement own Azure Service Bus transport integration using @nest.js/microservices package).

Implement payment (Apple/Google Pay, MasterCard) integration using UPC(Ukrainian Processing Center) API.

## Backend Node.js Developer at SafeSwiss 10/2018 – 09/2019

**Project:** Under NDA

Tech Stack: Node.js, Express, RabbitMQ, Redis, MySQL, MongoDB, OpenPGP

Responsibility: I developed microservices and implemented integrations between different

microservices using REST + WebSocket + RabbitMQ communications.

Created and optimized SQL tables + queries using knex ORM.

Developing security solutions (for example I implemented self-made DDos protection using Redis).

Design and code review.

Worked with encryption and related technologies OpenPGP, DHKE, RSA.

#### **FullStack Node.js Developer Freelance**

11/2017 - 10/2018

**Project:** Start-up related to food delivery

**Tech Stack:** Node.js, Express, PostgreSQL, Redis, React + Redux, WebSockets, ANTD **Responsibilities:** 

I developed a monolithic application and frontend for it in a team of 4 freelance developers. I implemented authorization flow using Redis for Session management, store data using PostgreSQL, some logistic and asynchronous updates using websockets.

#### Skills & Technologies:

- Node.js,JavaScript (TypeScript)
- Python (aiohttp, Flask), C/C++, Java
- AWS (CDK, SDK, Lambda, API Gateway, Cloudwatch, S3, DynamoDB, SQS, SNS, Cognito, Amplify, RDS, ElastiCache, ElasticSearch)
- Microsoft Azure Services (Service Bus, CosmosDB, Key Vault)
- WebSocket, REST, gRPC, SOAP, GraphQL
- Redis, memcached,
- RabbitMQ, Kafka, ZeroMQ
- PostgreSQL, MySQL, MemSQL, MongoDB
- Express, Koa, NestJS, Loopback4, Fastify, MarbleJS, FeathersJS
- Docker, K8s
- Nginx, Reverse Proxy

- Git, Git Flow
- Blockchain (EOS)
- Scrum, Agile

#### **Education:**

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" Faculty of Applied Mathematics Bachelor of Computer Engineering 2017 – 2021

### Languages:

English - Upper Intermediate Ukrainian - Fluent