

Andranik Arakelyan

Full-Stack Developer | TypeScript | Node.js | React | NestJS

✉ andranik.arakelyan.me@gmail.com

🌐 <https://www.andranikarakelyan.com/>

📍 Yerevan, Armenia

About Me

I'm a dedicated Full-Stack Developer with a passion for building robust, scalable software solutions. With experience across various technologies, I enjoy tackling complex challenges and creating efficient systems that deliver real value.

My journey spans both backend and frontend development, where I've designed APIs, implemented microservices architectures, and crafted intuitive user interfaces. I'm continuously improving my English proficiency while working on various projects that combine my technical skills with practical problem-solving.

Currently, I'm working on multiple personal projects that align with my hobbies and interests. These projects not only allow me to explore new technologies and refine my skills, but they also have the potential to evolve into viable business opportunities in the future.

I'm particularly focused on creating tools that solve real-world problems, emphasizing clean code, performance optimization, and excellent user experience. My current tech stack centers around TypeScript, NestJS, React, and NextJS, with a growing interest in AI integrations and developer productivity tools.

I actively leverage AI tools to accelerate my development process while maintaining full control over code quality and architecture. This approach allows me to rapidly prototype, optimize solutions, and focus on high-level design decisions while ensuring all code meets my standards for maintainability and performance.

Technical Skills

Backend Development

Node.js (6+ years)
TypeScript (5+ years)
NestJS (4+ years)
Express (4+ years)
PostgreSQL (5+ years)
MongoDB (3+ years)
GraphQL (2+ years)
RabbitMQ (2+ years)

Frontend Development

React (3+ years)
Next.js (2+ years)
JavaScript (6+ years)
HTML/CSS (6+ years)
Tailwind CSS (2+ years)
Vue.js (1+ year)
Responsive Design (3+ years)

DevOps & Tools

Docker (4+ years)
Git/GitHub (6+ years)
AWS (3+ years)
Microservices (4+ years)
CI/CD (3+ years)
Linux (6+ years)
Vim (5+ years)

Professional Experience

Full-stack Developer

Jan 2025 - Present
Yerevan, Armenia (On-site)

Self-employed

- Designed and created ToolsZone.net, a comprehensive suite of browser-based utility tools with a clean, ad-free interface
- Architected and developed a microservices-based language learning platform (LLT) encompassing web and admin panel applications
- Implemented backend services using TypeScript/NodeJS, NestJS, PostgreSQL, MongoDB, and RabbitMQ
- Developed frontend components utilizing TypeScript, React/NextJS, and Tailwind CSS
- Designed features including text and video reading/watching with integrated dictionary lookup, YouTube media extraction, speech-to-text processing with Whisper, and sentence saving capabilities
- Gained experience across the full stack, from UI components to server-side logic and infrastructure

Node.js React.js NestJS TypeScript TypeORM Next.js RabbitMQ PostgreSQL MongoDB Docker

Freelance Backend Developer

Sep 2024 - Jan 2025 · 5 mos
Remote

Self-employed

- Developed and implemented robust APIs using NodeJS and TypeScript with the NestJS framework
- Designed and wrote comprehensive unit tests to ensure API reliability and code quality
- Utilized PostgreSQL for data persistence and management

Node.js TypeScript PostgreSQL Unit Testing NestJS

Backend Developer

Feb 2021 - Oct 2022 · 1 yr 9 mos
Yerevan, Armenia (On-site)

Teracloud Armenia

- Led the design of the backend architecture for Blast TV, ensuring scalability and performance
- Defined and documented backend workflows, effectively delegating tasks within the backend team
- Authored comprehensive system and API documentation using Confluence and Swagger, improving team understanding and integration efforts
- Conducted thorough code reviews, contributing to improved code quality and reduced bugs
- Swiftly identified and resolved critical bugs in the production environment, minimizing impact on end-users
- Developed and implemented numerous RESTful CRUD APIs using NestJS, enhancing system functionality
- Designed and implemented a multi-PostgreSQL database architecture and schema, optimizing data storage and retrieval
- Established and documented coding standards and naming conventions, promoting code consistency across the team
- Integrated Sentry for proactive error monitoring and debugging
- Integrated AWS S3 for scalable and reliable storage of system resources
- Designed and implemented a microservice to abstract the handling of uploadable resources, improving modularity
- Enhanced the authentication microservice by adding new features and resolving issues within a dynamic roles-based access control system
- Developed an API stress testing tool, ensuring the robustness and performance of backend endpoints

Node.js NestJS AWS PostgreSQL JavaScript TypeScript Docker Jira Microservices Sentry TypeORM Redis
CI/CD

Backend Developer

Mar 2020 - Jan 2021 · 11 mos
Yerevan, Armenia (Remote)

Hexact

- Worked on Hexometer and Hexowatch, web monitoring platforms that track website changes and issues
- Successfully resolved critical production issues, ensuring system stability for end-users
- Developed and optimized complex MongoDB aggregations and PostgreSQL queries, improving data processing efficiency
- Implemented GraphQL APIs, providing flexible and efficient data fetching capabilities
- Developed new tools leveraging a headless browser (Puppeteer) to enhance system functionality
- Significantly improved the web crawler/spider in Hexometer through fixing bugs, optimizing performance, re-implementation, and extending its capabilities
- Implemented a structured and readable logging system, improving observability and debugging
- Integrated the Stripe payment system, enabling secure and reliable transaction processing
- Developed APIs for generating comprehensive summaries, reports, statistics, and charts, providing valuable data insights
- Implemented a thread pool to manage high-concurrency synchronous operations, improving system responsiveness
- Designed the backend architecture and implemented core components for both products
- Implemented a graceful shutdown mechanism and recovery strategies to enhance system resilience against partial failures and reboots

TypeScript GraphQL Node.js PostgreSQL MongoDB JavaScript Microservices Stripe RabbitMQ GCP Docker
Apollo

Backend Developer

Dec 2018 - Mar 2020 · 1 yr 4 mos
Yerevan, Armenia (On-site)

Vishup Technologies

- Designed the complete backend architecture for the company's smart home system The Moon
- Worked as the main backend developer for Vishup PC and mining farm rental system
- Developed and implemented a custom bidirectional communication protocol over TCP for real-time data exchange
- Implemented a flexible trigger-rule-action mechanism for controlling a wide range of Z-Wave smart home devices
- Deployed and managed the system using PM2
- Created an intuitive smart home system management admin dashboard using VueJS
- Gained practical experience in NodeJS, TypeScript, PostgreSQL, MySQL, WebSocket, TCP/TLS, and binary data manipulation and processing

Node.js TypeScript PostgreSQL WebSocket JavaScript TCP/IP MySQL Vue.js IoT Microservices

Frontend Developer

Sep 2018 - Dec 2018 · 4 mos
Yerevan, Armenia (On-site)

ColibriLab LLC

- Gained foundational experience in AngularJS, HTML, CSS, and JavaScript
- Developed problem-solving skills through effective work on challenging codebases
- Implemented user authentication forms using Facebook and Google APIs
- Integrated the Stripe payment form into the frontend
- Developed new user-facing pages and features and efficiently resolved existing bugs

JavaScript HTML CSS AngularJS Facebook API Google API React.js Stripe

Projects Portfolio

Blast TV

Teracloud Armenia
Feb 2021 - Oct 2022

A gaming platform focused on eSports tournaments, stats, and news. I designed the backend architecture from scratch and played a key role in bringing the platform to production.

Core capabilities:

- Streaming of gaming events
- Tournament management
- Real-time stats tracking for competitive gaming enthusiasts

[Visit Blast TV](#)

Node.js

TypeScript

JavaScript

NestJS

PostgreSQL

AWS

Docker

Sentry

Backend Development

API Development

Database Design

Systems Architecture

Gaming Platforms

Personal Project

ToolsZone.net - Online Utility Platform

Apr 2025 - Present

Developed ToolsZone.net, a comprehensive web platform offering hundreds of free, browser-based utility tools with a clean, ad-free interface.

This Next.js-powered application features tools across multiple categories including Text Tools, Developer Tools, Web Utilities, Security Tools, AI & Productivity Tools, Media Tools, Code Generators, Converters, SEO Tools, Image Tools, PDF Tools, and Calculators.

The platform emphasizes AI-powered tools alongside traditional utilities, providing both automated solutions and manual processing options for various tasks.

As the sole developer, I maintain an active development cycle with updates every 1-2 weeks, heavily leveraging AI tools to accelerate the development process while maintaining full control over code quality and architecture.

The platform prioritizes simplicity, speed, and mobile-first design while requiring no user login. Built with a modern tech stack for excellent performance and seamless user experience.

[Visit ToolsZone](#)

Next.js

React.js

TypeScript

AWS

Tailwind CSS

Front-End Development

Responsive Web Design

SEO

User Interface Design

JavaScript

Technical Documentation

Hexowatch

Hexact

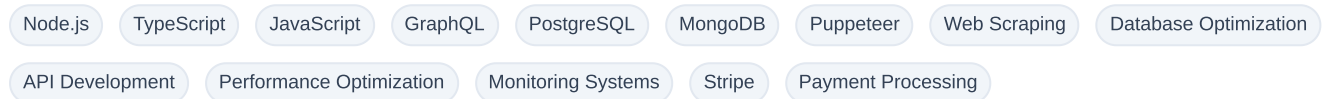
Sep 2020 - Jan 2021

A powerful website change monitoring platform that tracks visual, content, code, technology, and price changes across websites.

My contributions:

- Developed several critical tools for the platform
- Significantly improved data processing efficiency through optimized database queries
- Enhanced monitoring capabilities, particularly in HTML element detection and content tracking

[Visit Hexowatch](#)



Hexometer

Hexact

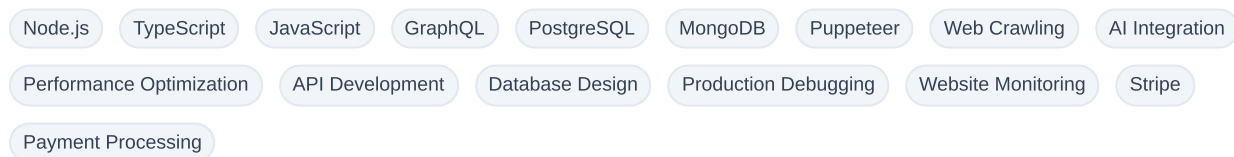
Mar 2020 - Sep 2020

An AI-powered website monitoring platform that continuously checks for issues across six core areas.

Key achievements:

- Implemented several GraphQL APIs for data retrieval
- Optimized database queries for better performance
- Developed multiple monitoring features
- Significantly improved the web crawler/spider by fixing bugs, optimizing performance, and extending capabilities
- Resolved several critical production issues that improved system stability and user experience

[Visit Hexometer](#)



Language Learning Tools (LLT)

Jan 2025 - May 2025

Developed a comprehensive language learning platform with a microservices architecture that helps users learn languages through customizable tools.

The system includes a web application, admin panel, and multiple backend services working together to provide vocabulary learning, lesson management, and multimedia content integration.

Key features include:

- Language lesson management with text and video content
- Word frequency analysis and vocabulary tracking
- Text tokenization and paragraph management for learning materials
- YouTube video integration with subtitle extraction and speech-to-text processing using Whisper
- User progress tracking across lessons and vocabulary
- Resource service for file and asset management
- Task service for handling asynchronous operations like subtitle and speech processing

TypeScript

Next.js

NestJS

PostgreSQL

MongoDB

AWS

Docker

Microservices

REST APIs

API Documentation

Swagger API

JWT

Database Design

Systems Design

GitHub

Jest

Unit Testing

Containerization

Prime Events AM - Event Planning and Organization Platform

Jan 2025 - May 2025

A landing page for an event decoration service in Armenia specializing in illuminated letter displays and decorative arrangements for birthdays and special occasions. Built with Next.js and features Armenian language support.

[Visit Prime Events AM](#)

Next.js

React.js

Amazon Web Services (AWS)

Tailwind CSS

TypeScript

Front-End Development

UI/UX

Responsive Web Design

Search Engine Optimization (SEO)

Web Performance

Git

The Moon

Vishup Technologies

Aug 2019 - Mar 2020

The Moon was a smart home system project featuring a maglev-based control system for smart home devices, allowing users to automate and remotely manage their home environment.

I designed the backend architecture for this IoT platform, implementing a custom bidirectional communication protocol that enabled real-time control of Z-Wave devices through a user-friendly interface.

Node.js

TypeScript

JavaScript

PostgreSQL

MySQL

WebSockets

TCP

RTMP

Systems Design

IoT Development

Real-time Communication

Z-Wave Protocol

Smart Home Integration

Backend Architecture

Vishup

Vishup Technologies

Dec 2018 - Aug 2019

Vishup was an innovative platform that enabled users to rent out their PCs and mining farms to other users who needed access to remote, high-performance computing resources with powerful GPUs.

As the main backend developer, I designed and implemented the core system architecture that facilitated secure remote connections, resource allocation, and payment processing between users. The platform created a marketplace for computational resources, allowing GPU owners to monetize their hardware when not in use.

- Node.js
- TypeScript
- JavaScript
- PostgreSQL
- MySQL
- WebSockets
- TCP
- Systems Design
- Backend Architecture
- Payment Processing
- Remote Access
- Resource Management
- Marketplace Development
- GPU Computing
- Security

Education

Computational and Applied Mathematics

2010 - 2012

Yerevan State University

Studied computational and applied mathematics with focus on programming fundamentals and mathematical modeling.

- Java
- C++

Languages

Armenian	English	Russian
Native	Professional	Full Professional