Vitali Gerzhuk

(845) 906-0634 · vitalii.gerzhuk@gmail.com · vitaligerzhuk.dev
github.com/proeukariot · linkedin.com/in/vitalii-gerzhuk

SOFTWARE ENGINEER

Full-Stack Developer with hands-on experience building scalable web applications. Proficient in TypeScript, React, Next.js, and Node.js. Skilled in developing secure backend services and optimizing performance, with a passion for solving real-world problems. Eager to contribute to innovative projects and dynamic teams. Authorized to work in the US without visa sponsorship.

SKILL SET

Programming Languages:

JavaScript (ES2015+), TypeScript, C#, C++, SQL, HTML5, CSS3, SASS

Development Tools:

Postman, Git, GitHub Actions, Jira, Webpack, Docker, Rest API, GraphQL

Frameworks & Libraries:

React, Redux, Next.js, Node.js, Express.js, NestJS, TypeORM, Prisma, TailwindCSS

Databases:

PostgreSQL, SQL Server, MongoDB, Redis

EXPERIENCE

AI Movie Recommender (Project)

Description: AI-powered movie search app recommending films based on user preferences

- Designed and implemented an AI-driven movie recommendation system MVP using the Google Generative AI API, optimizing complex user queries and achieving over 95% accuracy.
- Reduced API calls by 33%, improving application efficiency by implementing debouncing techniques.
- Designed a scalable architecture capable of handling high-volume traffic, preparing the app for thousands of queries per second.
- Integrated Redis caching strategies, improving app performance and decreasing search load times by 800%.
- Simplified the authentication process by integrating OAuth2, enabling seamless login with Google credentials.

Technologies: React, Redux, TypeScript, Styled Components, Express.js, Redis, MongoDB, Google Generative AI, OAuth2

3D Marketplace Platform (Coursework)

Description: 3D asset-sharing marketplace featuring live model previews in the browser

- Enabled real-time interaction with 3D assets (up to 50MB) using Three.js, providing a smooth and interactive preview experience.
- Designed and implemented over 15 scalable API endpoints (4,500+ lines of code) using NestJS modules, services, guards, interceptors, and Dependency Injection (DI) to support robust data interactions, reduce code duplication, and enable efficient feature expansion.
- Utilized Azure Blob Storage for fast retrieval and secure storage of 3D assets and images, achieving 18% faster load times with optimized image compression and lazy loading.
- Implemented JWT authentication and integrated Stripe API for secure transactions and payment processing.
- Enhanced navigation with infinite scrolling and advanced sorting/filtering using RxJS, improving user satisfaction.
- Architected a scalable relational database schema in MS SQL with TypeORM, enabling efficient data retrieval (under 10ms) for user and model data by leveraging indexing, query optimization, and efficient data modeling techniques.
- Integrated third-party components from Angular Material and TailwindCSS for refined UI/UX.

Technologies: Angular, Typescript, Material UI, ThreeJS, NestJS, TypeORM, RxJS, SQL Server, Azure Blob Storage, Stripe.

Professional Website (Personal Project)

Description: Portfolio website featuring smooth, modern animations for an interactive experience

- Developed a modern, responsive portfolio website using Tailwind CSS, achieving a 90% Lighthouse performance score for speed, SEO, and accessibility.
- Dedicated 10+ hours to learning GSAP and implemented smooth animations within 3 days, increasing average user time on page by 100% in early testing.
- Reduced First Contentful Paint (FCP) by 42% (from 2.6s to 1.5s) and Largest Contentful Paint (LCP) by 35%, enhancing the mobile user experience through font loading strategies.
- Added dark mode functionality, improving user experience by providing a comfortable visual option in low-light environments.

Technologies: TypeScript, Tailwind CSS, GSAP

EDUCATION

Bachelor of Software Engineering   **Sep 2020 - Jun 2024**

State University of Intelligent Technologies and Telecommunications

Relevant courses: Object-oriented programming, algorithms, data structures, operating systems, computer networks, software engineering, database systems, and web development.