Ivan Germanov

Software Engineer

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EXPERIENCE

Frontend Engineer

Post.news

📅 09/2023 - 04/2024   📍 New York, United States, Remote

News content platform (similar to X), early-stage startup.

- Built a web and mobile (Android, iOS) news content platform using Solid.js, Solid Start, TypeScript, Capacitor, XState, Zod, Cypress, Vite, and Vitest.
- Implemented features such as related tags for posts, content reposting, profile customization, and native push notifications with OneSignal.
- Implemented accessibility improvements to meet A11Y standards.
- Developed native iOS and Android sharing functionality, enabling users to share posts and profiles directly via the system's native share sheet (e.g., sharing to other apps, saving to notes).
- Implemented Amplitude for A/B testing, contributing to decisions that improved user retention.
- Implemented user behavior tracking using Singular, capturing metrics to inform product decisions.
- Revamped multiple components of the platform to align with new Figma design system, and was responsible for maintaining the alignment between design specifications and product.
- Developed and maintained dynamic email templates for newsletters using MJML, ensuring daily delivery to all users.
- Developed and maintained automated Cypress end-to-end tests to prevent regressions.

Software Engineer

Axion BioSystems

📅 11/2020 - 08/2023   📍 Eindhoven, Netherlands

Biomedical company, advanced microscopes and cloud-based platform for cellular experiments.

- Migrated a legacy WPF application to a modern web stack using Electron, Vue, TypeScript, and WebSockets, based on Figma prototypes that I designed and refined through user testing.
- Built and optimized video and image export containers deployed on Microsoft Azure, leveraging C#, Node.js, Docker, and FFmpeg.
- Led initiative to transition from a monolithic frontend to a modular monorepo using pnpm workspaces.
- Led codebase migration effort from Vue 2 to Vue 3 by leading team meetings and writing a wiki to document the process.
- Migrated project from Tailwind 1 to Tailwind 2, verified migration using BackstopJS, and reduced CI/CD pipeline build time by 5x.
- Established CI/CD pipelines for publishing JavaScript and Vue packages to a private Azure registry, enabling reuse across projects.
- Improved code maintainability and separation of concerns by introducing the Axios repository pattern in TypeScript.

EDUCATION

MSc in Computer Science and Engineering

Eindhoven University of Technology

📅 2022 - 12/2024

- Master thesis 8.5/10
- Data structures and Algorithms, Advanced algorithms
- Architecture of Distributed Systems, Big Data Management
- Machine Learning, Deep Learning
- Database modelling
- Probability and Statistics, Calculus, Logic and Set Theory
- Automata, Language Theory and Complexity
- Technology Entrepreneurship and Marketing

BSc in ICT and Software Engineering (Cum Laude)

Fontys University

📅 2017 - 2021

High School Diploma

First English Language School (FELS)

AWARDS

🏅 **Best Student Award**
Ranked 2nd highest GPA (9.0/10) out of ~200 students

FIND ME ONLINE

🌐 **Personal Website**
www.ivan.it.com

 GitHub
www.github.com/ivangermanov

in **LinkedIn**
www.linkedin.com/in/ivangermanov

EXPERIENCE

Junior Software Engineer

CytoSMART Technologies

📅 10/2019 - 10/2020   📍 Eindhoven, Netherlands

- Built and designed browser-based image processing tools using Vue, TypeScript, WebGL, C# and Microsoft Azure.
- Collaborated with the team to transition web pages from ASP.NET to Vue SPA.
- Introduced Cypress for end-to-end testing and increased unit tests from 300 to 1000 (92% coverage) through Test-Driven Development (TDD).
- Improved developer workflow by integrating Git hooks (husky) and ESLint to automate code quality checks.

Software Engineer Intern

CytoSMART Technologies

📅 03/2019 - 09/2019   📍 Eindhoven, Netherlands

- Developed an interactive visualization application for cell colony analysis using React, Redux, LeafletJS, and D3.js.
- Optimized dynamic filtering and visualization of tens of thousands of data points.
- Improved storage and retrieval performance of gigabytes of data using Azure Blob Storage.

PERSONAL PROJECTS

Kraft Heinz Overfill

📍 Iowa City, United States, Remote

🔗 https://github.com/ivangermanov/heinz

Created an app to predict product overfill in a Kraft Heinz factory.

- Gathered on-site information and requirements about factory operations and data flows.
- Developed interactive graphs and visualizations related to overfill metrics using Vue, Quasar, and ECharts.
- Developed a Python Flask backend integrating scikit-learn and TensorFlow models for predictions.

Room Reservation System for University

🔗 https://github.com/ivangermanov/frooms

Developed an interactive room reservation system.

- Developed an interactive room reservation system as a Progressive Web App (PWA) using Vue and Nuxt.js.
- Implemented a dynamic map for room reservations with LeafletJS.
- Built a back-end REST API using C# ASP.NET by following the repository pattern, dividing the API into controllers, services, and a database layer.
- Integrated the university's open API for real-time room availability.
- Managed database schema evolution using migrations.

SKILLS

Languages

JavaScript   TypeScript   C#

Python   Java   PHP   SQL

HTML   CSS/Sass/SCSS

GLSL/WebGL

Frameworks and Libraries

Vue   Vuex   Nuxt   React

Solid   Laravel   Electron

Capacitor   Tailwind   Bootstrap

Webpack   Vite   ESLint   Jest

Vitest   Cypress   ASP.NET

Node.js   Express   Flask   MJML

Tools and Technologies

Git   Docker   Linux   pnpm

Turborepo   Azure Pipelines

GitHub Actions

Cloud & Databases

Microsoft Azure   AWS

SQL Server   MySQL