

# MUZIYUAN(ROSSEN) GAO

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## Professional Summary

Experienced Full Stack Developer with over 5 years in e-commerce web applications, leveraging mobile-first and test-driven methodologies. Proficient in React.js, AngularJS, Vue.js, NodeJS, Python, .NET Core. Agile in project management to meet sprint goals and business objectives.

## Core Qualifications

- HTML & CSS, TypeScript, JavaScript
- C#, ASP.NET, MVC
- React.js, AngularJS, Vue.js, Ajax, jQuery
- React Native, Flutter
- Node.js, MSSQL, MongoDB, MySQL
- Bootstrap, SASS, Webpack/Vite, Git, Docker
- Azure, AWS, Heroku, Firebase
- WordPress, Figma, Photoshop, CAD
- Apache, IIS web server, RestAPI
- Golang, PHP, Laravel, Python, Java, SAS

## Experience

**Full Stack Developer**, 12/2023 to 03/2024

### V-MAX Media

- Led the development of a web/mobile financial application in partnership with Hero Financial, adopting a mobile-first and test-driven development approach with Next.js and React Native.
- Conducted comprehensive analysis and design to align application features with user requirements, optimizing performance through effective API call management strategies.
- Integrated Berkeley and Transformat APIs to facilitate advanced international payment and currency exchange capabilities.
- Spearheaded the integration of complex databases and contributed to the architecture of data warehouse solutions, enhancing data storage and retrieval capabilities.
- Automated CI/CD pipelines using GitHub Actions, facilitating deployment to AWS EC2.
- Determined sprint goals and estimated the effort required for each task during sprint planning.

**Full Stack Developer**, 05/2023 to 12/2023

### AlphaPay Technology

- Collaboratively developed two web applications using React.js and three cross-platform mobile applications utilizing React Native, integrating algorithms for enhanced functionality.
- Participated in the full app life cycle from concept to release on App Store and Google Play.
- Integrated Ingenico and Moneris payment gateways to facilitate secure and efficient in-app purchases, improving customer trust and satisfaction.
- Engaged in database development and optimization, leading to a 15% increase in transaction speed and a 20% reduction in payment errors.
- Pioneered new methods of code review during daily stand-ups to increase sprint velocity by 20% and reduce the number of production defects by 30%.

**Software Developer**, 03/2022 to 03/2023

**LawDepot**

- Led the innovative transformation of online legal forms from XML structures to a Vue.js web application, leveraging a custom-built transpiler to automate the conversion process.
- Directed the entire development life-cycle for the transpiler project, from requirement analysis and architectural design to successful production deployment.
- Refactored complex XML schemas into Vue.js components using advanced techniques, enhancing code scalability and maintainability.
- Collaborated with software engineers to develop a comprehensive suite of unit tests for the transpiler logic and Vue.js output.
- Compiled and maintained technical documentation on the transpiler's architecture and usage in a private wiki, streamlining onboarding for new developers and boosting team productivity.

**Frontend Developer**, 09/2021 to 02/2022

**Webmainland Media**

- Developed landing pages and dashboards of social media web apps using Angular, resulting 15% increase in user retention rate.
- Collaborated with stakeholders to translate user requirements into effective design and implementation plans, ensuring applications met design specifications and user expectations.
- Boosted web traffic by improving navigation, enhancing visuals, and strengthening SEO.
- Implemented RESTful web services to support dynamic data management, showcasing the ability to integrate and manage APIs for improved application functionality.

**Research Assistant**, 10/2017 to 03/2019

**University of Alberta**

- Collected raw data using Python web crawling techniques from various online sources to gather greenhouse gas emissions data related to industrial processes.
- Utilized Pandas for data manipulation—filtering, transforming, aggregating—to extract insights, ensuring data integrity by addressing missing values and outliers.
- Developed MATLAB applications to simulate the behavior of CO<sub>2</sub> emissions in industrial processes, considering various scenarios informed by scientific literature.
- Designed and implemented sophisticated mathematical models to optimize technologies targeting removal efficiency of industrial CO<sub>2</sub>.
- Conducted robust data analysis, optimized MATLAB applications, and authored research papers to prove the feasibility of industry-partnered solutions.

## Education

**Diploma:** Digital Media and IT

**Northern Alberta Institute of Technology** - Edmonton, Alberta

**MSc:** Chemical and Materials Engineering

**University of Alberta** - Edmonton, Alberta

**BSc:** Materials Engineering

**Dalian University of Technology** - Dalian