

Haorong Li

Web Developer

/Full Stack

EXPERIENCE

Software Developer

satcom direct/Gogo Inc Aug 2021 - Present - 4 years, Ottawa Canada

Full-stack Developer with 4+ years of experience building scalable embedded UIs.

Proficient in designing modern web application architecture using React. Contributed 43% of total code across frontend and web server repositories.

Front end Development:

- Rebuilt and modernized web dashboard architecture using **React**, **Redux RTK**, and **Vite**, improving page load times by **40%** and reducing developer workload by **60%**.
- Implemented **React Lazy** & **Suspense** for dynamic route-based code splitting, enhancing performance.
- Developed **OpenWRT** router UIs, utilizing **React Context** and **Webpack** to create reusable, state-aware components.
- Built secure desktop apps with **Electron**, integrating **JWT** authentication and **MQTT** communication for real-time control and data sync.

Backend & Server Development:

- Created **RESTful APIs** using **Drogon (C++)**, and device interaction logic.
- Transitioned from session-based authentication to JWT-based authentication and validation.
- Designed internal Slack apps using **Slack Bolt** and **Node.js**, automating device password resets and credential management.

Embedded Linux Development:

- Managed **MQTT** servers for authenticating UI connections.
- Manage **antenna** and **modem** info publishing and actions by **MQTT** for UI.

EDUCATION

Mobile Application Design & Development

Algonquin College

Sep2019 - Apr 2021, Ottawa, Canada

Dean's Honours: Fall 2019 ([link](#))

GPA: 3.82/4 ([link](#))

EDUCATION

B.A.Graphic Design

South China Normal University

Sep 2013 - Sep 2017, Guangdong China

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📍 Ottawa, Ontario, Canada

🐙 github.com/li000592

🔗 [haorong.netlify.app\(portfolio\)](https://haorong.netlify.app(portfolio))

🌐 linkedin.com/in/haorongli

Code Language

Javascript, Typescript, HTML, CSS,
C++, Bash, Json

Frontend

React.js, Redux RTK, MUI, Vite,
Electron, Tauri, Webpack,
Bootstrap, Materialize, Bulma

Backend

Node.js, Drogon (C++), JWT, MQTT,
SQLite, Spring Boot

Tools

Git, Bitbucket, Prettier, NPM

Embedded Linux

OpenWRT, Networking (TCP/IP),
Virtual Machine Development
menuconfig

Other

Graphic Design,UI/UX Design
Work with AI

EXPERIENCE

Graphic Designer

YongGuan Decoration CO., LTD

Oct 2017 - Sep 2019, Guangdong China

- Designed business cards and marketing materials
- Created interior renderings and floor plans
- Improved spatial layouts for client projects

→ **Router Dashboard GUI** ([Github](#))

A modern React-based dashboard for router management with real-time monitoring and developer-friendly backend data editing capabilities.

- **Easy Data Management:** Visual interface for editing backend configurations and router settings
- **Real-time Monitoring:** Live updates via MQTT integration
- **Developer Tools:** Built-in API testing and debugging console
- **Responsive Design:** Material-UI components with mobile support
- **Performance Optimized:** Redux Toolkit + React Lazy loading

Tech Stack: React, Redux ToolKit, Vite, Redux Lazy& Suspense, React Router, MUI, MQTT Client, REST API

→ **Telecom Service Platform** ([Github](#))

- Built backend architecture for managing telecom services with multi-tenant support and real-time monitoring
- Designed for cloud-native deployment using Docker and Kubernetes for scalability and resilience

Tech Stack: Spring Boot, REST API, Docker, Kubernetes

→ **Drogon - High-Performance C++ REST API Server** ([Github](#))

- Developed a lightweight RESTful API server using Drogon in modern C++
- Designed and secured endpoints with JWT-based authentication
- Supported concurrent requests with low latency for high-performance needs
- Suitable for use in IoT, embedded, or resource-constrained environments

Tech Stack: C++17, Drogon, REST API, JWT, JSON, CMake

→ **Slack Bot Password Generator** ([Github](#))

- Created a Slack chatbot to generate secure passwords on demand via commands
- Integrated with Slack using Bolt framework for a seamless team experience
- Promoted better security practices through automation in daily workflows

Tech Stack: Node.js, Bolt, MD5

→ **Astechnic – Industrial Product Website** ([Github](#)) ([Demo](#))

- Built a responsive corporate site to showcase Astechnic's combustion solutions
- Delivered clean UI with branded design, animations, and mobile support
- Deployed via serverless hosting for fast global access

Tech Stack: React, Vite, MUI, React Router, Framer Motion, Netlify