

Senior Software Developer

## Jona Cwejman

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Gothenburg, Sweden

Jonas's interest in UNIX, Emacs and Linux has been a cornerstone of his 7-year career in web development. He is a self-taught developer with a technically deep background, demonstrated through his contributions in various domains:

He has developed and led the architectural design of web services, worked with Dev Ops, made Linux services, and worked with audio electronics. In the realm of front-end development, Jona has pioneered innovative solutions within the React ecosystem, going behind the scenes and bringing new features with focus on data-practices, performance and maintainability.

Jona is equally enthusiastic about backend development and embedded systems, despite his primary career focus on front-end projects. He openly embraces opportunities in these areas with strong interest.

In addition to being a talented developer, Jona is structured, easy to communicate with and often brings enthusiasm and positive energy to the team.

**Javascript Ecosystem**  React, Redux, Apollo (GraphQL), Ramda, Node.js, Typescript, React Native, Jest, Axios (HTTP/REST), Webpack, Rollup, Next.js, Gatsby, Electron, NWJS, Styled Components, Emotion, Flow, Three.js, D3.js,

Angular, Ionic, Gulp

**Programming** Languages

Expert (JavaScript/Typescript) Hobby (Python, C/C++, Clojure/ClojureScript, Rust, Java, Elisp)

**Cloud Services** 

AWS, Azure, Azure DevOps, Digital Ocean, Netlify, Gitlab Cl, GitHub

Actions

**Tools & Services** 

Emacs, Vim, Docker, Podman, Kubernetes, DevSpace, LXC, Apache,

**Nginx** 

Operating **Systems** 

MacOS, Linux (Debian, Fedora, Ubuntu, Arch), Windows

Embedded

Cortex M4 (Teensy), ATMEGA32 (Arduino), Attiny85, ESP32,

targets

Raspberry Pi

Present - Jan 2024

## Dev Lead and Mentor at Save the Children (Alten Consultant)

Save the Children's local humanitarian initiative Hjulverkstan, in need for administrative web applications and a public website for in their expanding bike shops, Jona leads the development of a team of interns.

#### **Efforts:**

- Mentor the team: Teach through collaborative workshops about the ecosystem, choosing a tech stack, git hygiene, functional programming practices with React application design and more.
- Create build/development tools: Meet modern web requirements implementing Static Site Generation through SSR in React, without opting in to large frameworks like Next.js, resulting in an independent and simple implementation.

Tools and Methodologies: Java, SpringBoot, React, React Query.

## Volunteer at Hug (Help Ukraine Gothenburg) (Secondment)

Hug is one of Scandinavia's leading humanitarian NGOs aiding Ukraine. Initiated as a response to the escalating invasion in February 2022, the organization has grown quickly with acquired partners such as Volvo, Västra Götalandsregionen, Svenska Kyrkan and BRIS.

#### **Efforts:**

- Logistics manager: Responsible for delivering donations to Ukraine.
  - Led partnership with Volvo Defense's forwarders for transportation.
  - Orchestrated the planning, loading, and biweekly dispatch of full trucks, ensuring efficient delivery of aid.
  - Coordinated warehouse operations, including loading, packing, and transportation, in collaboration with volunteers.
  - Managed donor communications to secure vital donations.
- **Develop Hug's official website**: Enhancing the organization's online presence and communication (www.hug.ngo).

#### Efforts:

- 130 tons of aid sent: Facilitated the delivery of over 130 tons of crucial aid to Ukraine, valued at approximately 30 million SEK.
- 1500 monthly website visitors: Just a few months old the website grows and serves as a vital platform for structured communication.
  - Raised 200 000 SEK in three months: Integrated Swish and Stripe for monetary donations raised 200 000 SEK by the first quarter, streamlining the donation process.

Tools and Methodologies: Webflow, JavaScript, Stripe Payments Platform, Figma.

# Front End Lead and Momentary Cloud Architect at ABB Robotics (Alten Consultant)

Lead the development and reformation of the micro front end for ABB Robotics' next-generation IoT platform, alongside initiating an end-to-end department-wide architectural redesign.

The project had faced critical challenges, rooted in a substantial backlog of volatile architectural decisions. The front end therefore had both large technical debt but also a high level of complex responsibilities given the array of challenges with the IoT services and their APIs.

#### Efforts:

- Reform the micro front-end architecture: Align with best practices and Functional
  Programming principles to build a simple yet extensible design pattern, creating
  headway in how React Query can be used with complex dependent requests and
  real time sockets in a large micro front end.
- Launched System-Wide Architectural Overhaul: Responded to system architects'
  concerns over foundational flaws in the IoT architecture by leading the design and
  presentation of a new, UNIX Philosophy-inspired architecture. This approach
  emphasized modularity, utilizing a policy mechanism for separating concerns
  across independent services.
- Resolve DevOps complexity: Refine how all dependent web apps, services and libraries are built, delivered and connected as well as improving the local developer experience. Working with Azure Pipelines, Docker and Rollup.
- Web Services Enhancement: Advanced the authentication mechanisms in the Express.js server, improving security, feature set and user experience.
- **Development Guidelines:** Established shared programming guidelines to refine peer review, technical decision–making, and collaboration processes.

#### Results:

- Enhanced Performance and UX: Achieved significant reductions in code complexity and app load times (10x faster), and minimized side effects (4x less), facilitating real-time updates.
- Enable and deliver major features: Through the reformation enable and add the support for and implement a new extensive feature requested from stakeholders.
- Architectural redesign proposal accepted: The solution to solving the platforms foundational instability was successfully received by architects and management. Redefining their approach to IoT web services.

**Tools and Methodologies**: Typescript, React, React Query, GraphQL, Azure Digital Twin, Azure Services, Kubernetes, Docker, Azure DevOps Pipelines.

## Freelance Web/App Developer

As a means of flexible income Jona has throughout the years taken on occasional client for web / app work.

#### **Efforts:**

- Build websites for clients using React, Gatsby, Netlify CMS, Angular and jQuery.
- Create mobile apps using React Native and Ionic.
- Invent a Git based CMS using AWS Lambdas, Express.js and React (later Netlify CMS entered the ecosystem that Jona used in favor).

#### Results:

- Successfully deliver websites to clients in the art, restaurant and legal sectors.
- · Build an iOS app with for bird enthusiasts.

**Tools and Methodologies**: React, React Native, AWS Lambdas, Express.js, Gatsby, Netlify CMS, Angular, Ionic, jQuery.

## Front End Lead and Bobby Digital Studios

Lead front end development for Bobby Digital Studios in a phase of expansion, delivering the next generation of their flagship product Hivemind, a custom CMS type of service providing tailored websites, mobile and desktop applications for customers like Essity, Dentsply, and Haglöfs.

#### Efforts:

- Create a Drag & Drop library: Push the boundaries of the React ecosystem by leveraging the first Drag and Drop library with dynamic support for any types of layouts. Currently in use by multiple applications and clients.
- Lead front end development of new platform: In cooperation with back end and UX, take full responsibility for delivering the generation of Hivemind from scratch to beta release.
- Implement CI/CD for the web apps: Create and maintain pipelines with emphasis on optimising JavaScript bundling, running a stable environment and increasing transparency and traceability.

## Results:

Successfully deliver new platform to clients: Create and deliver the front end beta
release to clients. Bringing a fully-fledged content/product manager with an
operating system like user experience with windows, files and Drag and Drop.

• Establish new approach to GraphQL: Integrating Apollo's GraphQL JavaScript SDK with the paradigm of Redux in React. Combining queries, mutations, field validation and errors, authentication, navigation and real time updates through a unified uncoupled design pattern.

**Tools and Methodologies**: React, React Native, Redux, Apollo, GraphQL, AWS, Docker, Gitlab Cl, Kubernetes, Sketch App.

## **Cwejman Sound**

The boutique synthesizer brand Cwejman Sound, led by Wowa Cwejman needed assistance, from coming up with new products to optimising production and workflow.

#### Efforts:

- Co-create a new synthesiser: Create the initial drafts for new audio equipment product and together with Wowa take it to production.
- **Design new premium packaging**: Elevate the brand by designing new product packaging, creating a qualitative unboxing experience resonating with brands high quality repuration.
- Invent new plastic knobs: Design a new type of knob for the synthesizers and prepare it for production with a Chinese manufacturer.
- Administrate inventory and factory production: Implement a structure around production with inventory, factory guidelines, also helping with production problems with PCB drilling and Pick and Place machines.

Tools and Methodologies: Autodesk Fusion360, KiCad, Adobe Illustrator and React.

#### Short Term Consultant at Icomera

Providing globally leading connectivity solutions for public transportation, lcomera wanted to explore a new type of application easing the connectivity process.

#### Efforts:

 Develop an iOS / Linux integrated Proof of Concept: Create a mobile app using Angular, Ionic and iOS' WiFi SDK to connect with a Linux Systemd service created in Node.js Express.js on Icomera's Passanger WiFisystem.

**Tools and Methodologies**: Linux, Systemd, iptables, Node.js, Express.js, Angular, Ionic.

#### Accounting Software (Node.js)

- · Develop intelligent importing of bank transactions, with category recognition.
- Overview reports monthly and yearly with structured category balances.
- Made Node.js to pair with the plain text accounting tool ledger-cli.

## • 3D flying game (React Native, Three.js)

- Using intuitive two finger control, fly in space though geometrical shapes.
- · Implement a ECS inspired game engine framework

#### • Linux router and container orchestrator (Linux Fedora)

- · Configure DHCP and DNS server, VLAN (with external switch) and firewall on Linux Fedora home-built server.
- Setup docker for container orchestration of various services.

## • Drawing racing game (Python, Pygame)

• Implement a local multiplayer racing game creating pixelated drawings using Pygame.

### Minecraft mod (Java)

• Extend building blocks and texture coloring through in game UI using Minecraft mod loader API in Java.

## Race car Lego technics kit (ESP32)

- Adapt high torque brushless engine and ESC to Lego technics with battery powered ESP32 as receiving unit over Wifi.
- · Adapt potentiometers to Lego technics with a battery powered ESP32 for remote control over Wifi.

Education Design & Product development - Polhemsgymnasiet, Gothenburg,

Sweden (2014-2017).

Interests Making music, hobby electronics, being in nature and time with family and

friends.

Languages English and Swedish.

You have reached the end.



