Honolulu, HI laniakita@icloud.com

# Lani Akita

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## **Experience**

### Freelance Full Stack Developer

High Esoterica | Honolulu, HI

Mar 2023 - Present

- To grow awareness and revenue for my client's business, I developed a SvelteKit based eCommerce
  application that leveraged TypeScript, Shopify's Storefront API, Svelte's state management, form
  handling, and routing APIs, client-storage APIs, and Contentful, which deployed from Cloudflare pages.
- In 2024, I successfully realigned the user experience of the client's site to better communicate the client's services and digital content, with an added challenge of reducing operating costs and growing site traffic. I succeeded in delivering both a 500% cost reduction, and a +1500% increase in traffic, as I created a SEO optimized, content focused, high performance Next.js application that leveraged TypeScript, Contentlayer, mdx-bundler, jstoxml, Serwist, and Next.js' suite of metadata tools and advanced routing APIs, to replace the SvelteKit one. It's deployed on a serverless architecture on AWS, defined as IaC with SST+Pulumi, which is 400% cheaper than traditional Next.js hosting strategies.
- In both I used Tailwind CSS to create a responsive and accessible UI/UX, and a GitHub Action for CI/CD.

## Freelance Full Stack Developer Maitais at Sunset | Honolulu, HI

Dec 2021 - Present

- I raised awareness of my client's podcast by developing a GatsbyJS frontend, leveraging Javascript, React, and Tailwind CSS. Pages were generated from GraphQL queries to the user-friendly Strapi CMS backend, hosted on Heroku, with an attached Postgres DB, with assets stored in Google Cloud Buckets.
- Despite the client taking a break from podcasting, my efforts continue to grow awareness of their work at a steady +2,000 unique visitors per month, transferring bandwidth at no cost. I achieved the latter by optimizing the site for scale and cost efficiency from the start, and using Cloudflare's CDN.

# Freelance Web Developer Students Against Sexual Assault | Santa Barbara, CA Jul 2017 - Aug 2023

- I rapidly raised awareness of my client's organization (e.g., +10,000 unique visitors per day at one point), by creating and maintaining a high impact, cost-effective, reliable WordPress site. It featured resources for victims of sexual assault, a magazine accessible to authenticated users (leveraged the AuthO plugin), HTTPS routing, and an engaging layout I designed with the Jupiter theme framework.
- One challenge faced in production was due to underestimating my success in raising awareness for my client, as high user demand slowed the Digital Ocean, LEMP stack, VPS hosting the site to a crawl. However, I was able to rapidly implement a solution using a vertical scaling strategy, and returned the production site back to a performant state.

#### Research Intern

Mazer Laboratory | Santa Barbara, CA

Apr 2019 - Feb 2020

• I achieved in saving a project's timeline, as I assisted researchers by leveraging a web scraping algorithm to automate the retrieval of images of Streptanthus tortuosus from UC Berkeley's Jepson Herbarium.

# Director of Publicity Associated Students of the University of California, Jun 2018 - Jun 2020 Santa Barbara, Human Rights Board | Santa Barbara, CA

- I led a team of 6 individuals that successfully developed and implemented marketing strategies that
  grew event attendance (+250%) and awareness of our organization (Instagram impressions +500%). I
  also shared my expertise by teaching Graphic Design & Advertising courses to team members and
  mentoring them on industry-standard tools (Adobe Illustrator & Photoshop), designing captivating
  marketing materials, implementing a new brand identity, and consulting on printing logistics.
- While successful in my position, I learned career defining lessons along the way. Most importantly, effective leadership requires setting clear goals and expectations, and recognizing and utilizing individual strengths is vital in creating a successful, cohesive team

# Web Coordinator Associated Students of the University of California, Jun 2017 - Jun 2018 Santa Barbara, Human Rights Board | Santa Barbara, CA

I successfully raised awareness of the organization I volunteered with (fundraising impact +50K USD), In
developing a visually stunning, cost effective, reliable, WordPress site on a LEMP stack configured Digital
Ocean VPS running Ubuntu. Which, hosted meeting minutes, and links to forms for individuals and
groups to request funding from us. I used the Jupiter theme framework to create a high impact,
engaging layout. I implemented industry standard privacy and security practices, such as leveraging
Certbot to generate SSL certificates to enable HTTPS routing.

## **Technologies & Languages**

Languages | TypeScript, Javascript, GLSL, HTML, CSS, YAML, Markdown, Shell Script, Nix, Lua, Python, C Frontend Technologies | Next.js, SvelteKit, React, Svelte, Three.js, React Three Fiber, Threlte, Zustand, Tailwind CSS

Backend Technologies | Node.js, Bun, Drizzle ORM, SQLite, Postgres, JSON

Cloud & Development tools | AWS, Cloudflare, Vercel, GitHub Actions, SST, Pulumi, Podman, Docker, NixOS, Arch Linux, Fedora, Debian, Ubuntu, WSL, Distrobox, Webpack, Vite, Turborepo, Git, Jest, Vitest, React Testing Library, Happy DOM, Nixvim/Neovim

Other | Data Structures & Algorithms, Progressive Web Applications (PWA), Progressive Enhancement, Serverless Computing, Edge Computing, Server-Side Rendering (SSR), Static Site Generation (SSG), Distributed Systems, Responsive Design, Document Object Model (DOM), Accessibility, Continuous Integration / Continuous Delivery (CI/CD), Infrastructure as Code (IaC), Immutable Operating Systems, Reproducible Environments

#### **Education**

**BSc Biological Sciences** University of California, Santa Barbara

Sep 2016 - Dec 2020

### **Projects**

### Portfolio/Blog PWA | laniakita.com | github.com/laniakita/website

Feb 2024 - Present

- I engineered my site for long term maintainability, scalability, accessibility, and high performance. To do so, I leveraged TypeScript, Bun, Tailwind CSS, @react-three/a11y, along with Serwist to build this React+Next.js PWA, in a monorepo (Turborepo) on GitHub.
- To protect API endpoints, I implemented a memory optimized, Sliding Window Counter rate limiter (similar to the one used by Cloudflare) in the app's Middleware.
- Using SST+Pulumi, the app is deployed to a serverless AWS architecture, declared as IaC.
- Using Three.js/React Three Fiber, and raw loader, I implemented shaders written in GLSL, and created integrated, immersive, and vivid digital experiences that are featured across the site.
- I used Bun as a speedy package manager/runtime (File I/O APIs, testing suite) in prebuild scripts.
- I implemented a custom CMS with TypeScript, Bun, Drizzle ORM, and SQLite/Turso, before switching to Contentlayer for better reliability and less maintenance.
- I used Tailwind CSS to create traditional CSS animations, and an accessible, responsive, UI/UX.
- I used Zustand for advanced state management.
- I use jstoxml in generating the blog's Atom Web Feed and serve it via a Route Handler endpoint.
- I implemented Next/OG on a Route Handler endpoint, to generate Open Graph images on every route.
- Developed and utilized a Nix Flake to maintain a consistent and reproducible development environment across personal NixOS workstations.