## Sofia Alere

# Full-Stack Software Engineer

### **PROFILE**

Software engineer based in Chicago, adept in Node.js and Ruby ecosystems. I carry my passion for organization and my effective communication skills into every project I get to participate in. Most recently I created Sundial, a cron job monitoring and management system.

#### **SKILLS**

## Tools & Databases

Git/Github, PostgreSQL, MongoDB, SQLite, Docker, Postman, NGINX, Linux, Bash, HTTP, WebSockets, BCrypt

#### Cloud

Digital Ocean, AWS (EC2, IAM), Heroku, Fly.io, VPCs, Render

## Languages & Runtimes

Javascript (ES6+), Typescript, Ruby, Golang, SQL, HTML/CSS, Node.js

## Libraries, Frameworks, Misc

Express, Node.js, Sinatra, React/Redux, Jest, JQuery, Handlebars, SOAP, REST, XML, REST

### PROFESSIONAL EXPERIENCE

## 2023 – present

### Software Engineer & Co-Creator, Sundial

Sundial is a self-hosted, open-source cron job monitoring and management system that allows real-time bi-directional communication between the user and crontabs on one or multiple nodes.

- Developed a suite of command-line scripts to integrate the centralized monitoring and management service with any node's cron utility. (Node.js, Javascript)
- Addressed the challenge of the system reacting to non-events (when jobs do not run) utilizing Task Queues. (PostgreSQL 'pg-boss')
- Implemented a RESTful API facilitating app component communication and persistence of cron job execution information. (Node.js, Express, PostgreSQL)
- Constructed a responsive dashboard that provides real-time cron job execution data and a centralized place for performing CRUD operations on crontabs. (**React, Material UI, SSE's**)
- Enabled communication from the service to a node's crontab through an HTTP Express server, daemonized using systemd's unit files.
- Designed load tests to determine Sundial's performance under several conditions, observing a 0% failure rate up to 200 concurrent monitored jobs. (Grafana k6)
- Increased security on network connected multi-node set ups through requiring JWT Tokens and API Keys.
- Provided an alternative set up for even more security with instructions on how to deploy on Digital Ocean VPCs.
- Transformed central service set up from a 10-step+ to a 2-step process by containerizing server code. (custom DockerHub images, Docker Compose)
- Eliminated installation dependencies on target nodes with packaging scripts into executable binaries using the 'pkg' library
- Authored Sundial's comprehensive technical case study .
- Collaborated remotely with a team of four engineers across three time zones, utilizing Agile workflow practices such as daily stand-ups and pair programming. (**Github, Slack, Trello**)

#### 2021 – 2023 **Software Engineer,** Self Employed

Developed freelance and open-source projects.

#### **Shopify Southern Marsh Promotion:**

- Identified and debugged errors in promotional discount logic in a **Shopify** backend.
- Enhanced resilience of codebase segment through re-factoring it in a **Object-Oriented Programming** (OOP) paradigm. **(Ruby)**

### **Inquiry Hub:**

- Developed an application that aids in debugging web-hooks by receiving and displaying them in real-time.
- Built with React, Express, MongoDB, and PostgreSQL. Served on a Digital Ocean droplet via NGINX managed by PM2.

#### 2017 – 2021 Owner & Professional Yachting Contractor, Sea Nemo

Orchestrated excellent service on luxury yachts as a part of multiple skilled teams.

- Fostered a collaborative and positive work environment through developing strong connections with other teammembers and guests.
- Revamped training protocols and personally mentored several new staff with a focus on continuous professional development.