Sofia Alere

Full-Stack Software Engineer

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PROFILE

Software engineer based in Chicago. Through my previous career as a luxury yacht contractor I've built an appreciation for a collaborative work environment and honed my problem solving skills. 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

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

Languages
Javascript (ES6+), Typescript, Ruby, Golang, SQL, HTML/CSS

Runtimes, Libraries & Frameworks
Express, Node.js, Sinatra, React/Redux, Jest, JQuery, Handlebars

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 requring **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 team-members and guests.
- Revamped training protocols and personally mentored several new staff with a focus on continuous professional development.