

# Mary McDonald *Software Developer*

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## Skills

### Languages

JavaScript, Golang, SQL, HTML/CSS

### Runtimes, Libraries & Frameworks

Node.js, Express, React, React Testing Library, Jest

### Tools & Databases

Git/GitHub, PostgreSQL, MongoDB, Docker, nginx

### Cloud

Digital Ocean Droplets, Heroku


## Experience

2023/09 – 2023/12

### Sundial ([project-sundial.github.io](https://project-sundial.github.io))

*Software Developer*

Sundial is a self-hosted, open-source cron job monitoring and management system that provides real-time bi-directional communication between the user and registered 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)
- Eliminated installation dependencies by packaging scripts into executable binaries and containerizing server code (DockerHub images, Docker Compose)
- Architected a solution to anticipate and check cron job non-execution events using task queues
- Constructed a responsive dashboard that provides real-time cron job execution data and a centralized place for performing CRUD operations on crontabs (React, Express, Material UI, Server Side Events)
- Enabled communication between the service and remote nodes through an HTTP Express server, daemonized using systemd unit files
- Increased security on network connected multi-node set ups with JWT Tokens and API Keys
- Designed load tests to determine performance under various conditions using Grafana K6
- Collaborated with a team of 4 engineers across 3 countries
- Authored technical case study, available at [project-sundial.github.io/case-study](https://project-sundial.github.io/case-study) 

2021 – 2023

### Open-Source Projects

*Software Developer*

A selection of open-source projects developed during my career transition:

- **Request Bin:** A real-time web hook request inspection and debugging application (Node.js, Express, React, MongoDB, websockets)
- **Schedulo:** A session-based web application backed by a PostgreSQL database for volunteer management (Node.js, Express, Pug, PostgreSQL, Loki.js)

## Slack

2020 – 2021

### *Customer Insights Specialist*

- ran customer experiments and customer feedback programs for Product Managers for pre-release features (including writing SQL queries and building dashboards)
- worked with Product, User Research, Marketing, and Sales

2016 – 2020

### *Enterprise Lead*

- provided in-channel support to select large enterprise customers on the use of features and at-scale management of the Enterprise Grid product, working cross-functionally with Engineering, Product, and Sales
- investigated and surfaced bugs using Logstash (api logs), app logs, network logs, in-house tooling, and querying the data warehouse

2014 – 2016

### *Wattpad*

*Customer Support Agent*

- investigated and surfaced bugs and pain points within the product, interacting directly with Engineering and Product teams

**Education**

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2009 – 2012	<b>Bachelor of Arts</b> <i>UBC</i> German, minor in Russian	Vancouver, BC
2005 – 2009	<b>Bachelor of Mathematics</b> <i>University of Waterloo</i> Combinatorics & Optimization	Waterloo, ON