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) ⧉
Software Developer
Sundial is a self-hosted, open-source cron job monitoring and management service that 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)
- Architected a solution to anticipate and check cron job non-execution events (Task Queues)
- Enabled CRUD operations to a remote node's crontab utilizing a lightweight HTTP server that triggers requests for new data from the centralized management service
- Daemonized the HTTP server to ensure consistent availability (Linux, systemd)
- 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)
- Eliminated installation dependencies by packaging scripts into executable binaries and containerizing server code (DockerHub images, Docker Compose)
- Increased security on network connected multi-node set ups with JWT Tokens and API Keys
- Designed load tests to determine Sundial's performance under various conditions, observing a 0% failure rate up to 200 concurrent monitored jobs (Grafana k6)
- Collaborated with a team of 4 engineers across 3 countries
- Authored technical case study, available at 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 scheduling (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

2009 – 2012 Vancouver, BC	**Bachelor of Arts** *UBC* German, minor in Russian	
2005 – 2009 Waterloo, ON	**Bachelor of Mathematics** *University of Waterloo* Combinatorics & Optimization	