

# John Karabudak

📍 Newfoundland and Labrador, Canada

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## WORK EXPERIENCE

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**Software Developer** at WSP Environment & Infrastructure

May 2017 - Current

- Spearheaded our efforts to pay down technical debt efforts, decreasing our after-hours pages by over 50%.
- Optimized our weather portal performance, increasing our Google PageSpeed Insights score by 100%.
- Redesigned our data ingestion pipeline, achieving a 2000% improvement in processing times and reducing ingestor EC2 instance costs by 70%.
- Achieved over 10% savings in our group's AWS bill by using a combination of EC2 spot instances, AWS S3 Glacier Deep Archive, AWS Lambda, AWS VPC Endpoints, and other technologies.
- Championed the transformation of our operational security, introducing pivotal changes. This included a complete overhaul of all AWS permissions, removal of local administrative privileges from non-technical staff, and cultural changes promoting security as a priority.
- Orchestrated all technical aspects of the group's COVID-19 business continuity plan, ensuring uninterrupted operations during the pandemic.
- Known as a key crisis responder, adept at innovating immediate solutions in emergencies. Famously restored production operations within hours, even during AWS outages.
- Managed all technical and interpersonal aspects of a sophisticated meteorological system with hundreds of servers during a crucial inter-company carveout, while simultaneously automating most of the meteorologist onboarding and migration processes to be more efficient and secure.

## PROJECTS

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**PySarra** [🔗 https://github.com/JohnTheNerd/PySarra](https://github.com/JohnTheNerd/PySarra)

A Python client for Environment Canada's MQTT-based Sarracenia service that is designed to be easy to use.

**serial2mqtt** [🔗 https://github.com/JohnTheNerd/serial2mqtt](https://github.com/JohnTheNerd/serial2mqtt)

A Python microservice that streams LDJSON (Line-Delimited JSON) data from a serial port to a given MQTT broker.

**simple-gluster-ansible** [🔗 https://github.com/JohnTheNerd/simple-gluster-ansible](https://github.com/JohnTheNerd/simple-gluster-ansible)

An Ansible playbook to install and configure GlusterFS that is designed to be simple, with TLS encryption pre-configured.

**tarsnap-cron-docker** [🔗 https://github.com/JohnTheNerd/tarsnap-cron-docker](https://github.com/JohnTheNerd/tarsnap-cron-docker)

A Docker container image that uses Tarsnap to periodically and automatically back up your data.

**TurtleTale** [🔗 https://johnthenerd.com/?turtletale](https://johnthenerd.com/?turtletale)

A browser-based 2D platformer about a young turtle, complete with a level editor, an in-game shop, and toggleable cheats.

**WOLRelay** [🔗 https://github.com/JohnTheNerd/WOLRelay](https://github.com/JohnTheNerd/WOLRelay)

A Python Wake-on-LAN forwarder that is able to listen for ARP reply packets to track IP addresses without any agent process running on the target machine.

## EDUCATION

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**Bachelor of Science (Computer Science)** at Memorial University of Newfoundland

2014 - 2020