# Mike O'Driscoll

Kitchener, Ontario, Canada

mike@unusedbytes.ca • [linkedin.com/in/mikeodr](linkedin.com/in/mikeodr) • [github.com/mikeodr](github.com/mikeodr)

## Summary

I am a software developer with 14 years experience. My technical skills range from low level drivers to user facing GUIs. I've helped ship millions of phones, hundreds of robots, and secured numerous customer's networks. My home infrastructure is deployed with infrastructure as code, and I monitor it via Prometheus and receive outage alerts with PagerDuty. I've also automated my home with Home Assistant. Ask me more, I'd be happy to share!

## Experience

### Arctic Wolf - *Jan 2019 - Present* Remote/Waterloo, ON

Senior Software Engineer

Golang, Python, Flask, OpenAPI, Ansible, Kubernetes, DynamoDB, PostgreSQL, Terraform, AWS, Azure, Prometheus

- Improve customer security outcomes by optimizing Suricata configurations, improving performance, and decresing dropped packets up to 90% in specific circumstances
- Led updates to observability and alerting on all sensors. Coordinated with observability team and security services to deliver actionable alerts regarding sensor health directly to customers
- Updated build pipeline to generate a single unified image that all virtual and physical platforms share, reducing build chain complexity and testing
- Brought up multiple new physical hardware configurations, increasing sales by providing various performance options and form factors
- Added support for multiple hypervisors for virtual sensors, reducing sales friction by providing more options to a wider variety of customers. Opening up an estimated $2mm in potential bookings with the general availability of the Azure virtual sensor
- Simplified Sensor configuration by moving manual toil to REST based APIs, reducing provisioning and operation teams overhead and increasing efficiency.
- Coordinated with Infrastructure teams to migrate backend service code to ARM architechtures deployed on AWS Gravaton, realizing 10-30% savings in OpEx
- Generated detailed runbooks for operations teams to troubleshoot customer network and connectivity issues, eliminating 90% of all tickets passed to the engineering team for triage

### Dejero - *Feb 2018 - Dec 2018* Waterloo, ON

> Software Developer

> C++14, golang, python, boost asyncIO, VPN, tun/tap, grpc, protobuf

- Contributed major improvements to the network performance of the Gateway appliance, adding adaptive UDP input queue management reducing network latency
- Resolved Wi-Fi regulatory compliance configuration issues, allowing for certification and increasing sales in new geographies
- Add priority network connection routing to the blending stack, allowing customers to reduce their billing upwards of 80%
- Diagnosing customer network issues with with Wireshark and TCPDump, resulting in improvements to iptable/ebtable rules and increasing total data throughput by 10-15%

## Clearpath Inc. - *Jul 2014 - Feb 2018* Kitchener, ON

> Software Engineer • Jul 2014 - Nov 2016 | Senior Software Engineer • Nov 2016 - Feb 2018

> C/C++, Python, ROS, Boost, Qt, CMake, STM32, FreeRTOS, CAN/CANopen, I2C, Ansible, Rundeck, debconf, dpkg

- Promoted to software lead for the OTTO 100 Autonomous Mobile Robot (AMR), driving all platform software design through to product launch with multiple fortune 500 customers on multiple continents
- Worked collaboratively with electrical team to bringup embedded systems and design test plans. Minimizing the number of hardware revisions required to just 2 for the OTTO 100 AMR
- Improved manufacturing efficiency by replacing manual software installation steps with an automated installer with configuration prompts. Reducing per unit build time by 1.5 hours
- Reduced field serivce technician commissioning time with creation of REST APIs to setup wireless networking and AMR configuration options. Eliminating manual input errors and improving deployment time per unit.
- Contributed to ROS open source packages
- Inventor for a method of charging AGV/AMRs US11287831B2

**More Experience**

- *Please visit my LinkedIn profile for additional experience*

# Education

## Conestoga College - Software Engineering Technology *2006 - 2010*

Ontario Colleges Advanced Diploma