

# Ben Tremblay

Chilliwack, BC, Canada ♦ (778) 980-2515  
ben@tremblay.dev ♦ <https://tremblay.dev> ♦ gitlab.com/bhs.tremblay

## ME

I am first and foremost an enthusiastic software engineer. I have a high learning velocity and love learning new things.

## TECHNICAL PROFICIENCIES

**C, Python** (Django, DRF), **Networking** (OSI layers 2, 3, & 4), **Linux Networking** (netlink, netfilter, tc), **Dynamic Routing** (BGP, OSPF, Babel, BIRD), **Databases** (PostgreSQL).

## WORK EXPERIENCE

**TestFit Inc, TX, USA** — Software Engineer 06/2020 - Present

- Provide software engineering services as a contracted developer.

**Multapplied Networks, BC, Canada** — Software Engineer 01/2018 - 06/2020

Multapplied is a growing SDN startup with a small engineering team. Since the team is small, the breadth of responsibilities is large, but duties primarily fall into the domains of *full-stack development* and *network programming*.

- Research, design, and development of a Linux Traffic Control qdisc that performs per-flow packet reordering, innovating on the BENL algorithm to dynamically react to observable flow characteristics.
- Research, design, and development of a simple tunnel program using `io_uring` to avoid slow syscalls.
- Designed and developed an inhouse QA system that can boot a combination of containers, VMs, and physical machines, with configurable images and testing instruction sets, and aggregate the results for presentation on a web server, similar in concept to Linaro Automated Validation Architecture.
- Full-stack development of the SDN management server, a Django application that stores router configurations and exposes them through a frontend and a RESTful API.
- Designed, developed, and shipped a custom high-availability solution for a customer that had an otherwise unsupported use-case.
- Developed systems for detecting router failures and automatically adjusting network topologies accordingly to avoid outages and split-brain.
- Containerized the SDN package for use in a Kubecon 2019 keynote, installed and managed deployments in Loodse Kubernetes clusters, and provided networking support for the entire VCO 3.0 initiative (which involved coordinating with dozens of people dispersed across North America and Europe).
- Work with leadership to break up business cases into well-defined actionable programming tasks.
- Support partners on the phone and via email, available on-call 24/7 in case of emergency.

**Multapplied Networks, BC, Canada** — Intern Developer 2015

- Designed and developed a stateful system for automatically tuning several router settings, which employed a logistic regression model for classifying speed test results as “stable” or not.
- Added API endpoints for this new tuning feature as well as frontend components exposing them.

## EDUCATION

**University of the Fraser Valley, BC, Canada** — B.Sc. 2011 - 2015

Bachelor of Science with a major in Mathematics and minor in Computer Science.

*References available upon request.*