

# Igor Chovpan

437-665-0196 | [i.chovpan@mail.utoronto.ca](mailto:i.chovpan@mail.utoronto.ca) | [chopikus.dev](https://chopikus.dev) | [github.com/chopikus](https://github.com/chopikus) | [linkedin.com/in/chopikus](https://linkedin.com/in/chopikus)

## EXPERIENCE

---

### Junior Software Developer (C++)

July 2022 – July 2023

*Keepit; a backup solution for cloud services*

*Krakow, Poland*

- Launched *Azure Devops* backup coverage working with 3 teammates over the course of 12 months;
- Optimized the *REST API* usage up to 99% in extreme cases by preventing the redownload of *Work Items*;
- Participated in daily meetings, discussions in a team, argued projects' details with the tech lead and the CTO;
- Refactored *JSON* parsing in the *C++* development & *Java* testing for 4 months, unifying *JSON* parsing.

## TECHNICAL SKILLS

---

**Languages:** C++, Golang, Rust, Javascript, Typescript

**Other:** Linux, REST API, bash

## EDUCATION

---

### University of Toronto

Expected Spring 2027

*Computer Science Major, Mathematics Major, Coop student*

**Coursework:** CSC265 – Enriched Data Structures and Analysis – A+, CSC311 – Introduction to ML.

**uoftctf:** top 80 out of 1225 teams participating in the University 'Capture The Flag' cybersecurity tournament.

Volunteering note-taking for several courses. Supporting the Ukrainian community outside of class.

## PROJECTS

---

### rm-exporter

- Found limitations of the local export on a *reMarkable* tablet, including inability to export a folder and failure to download notes larger than 10MB;
- Developed a GUI client supporting export of any combination of folders and large notes by interacting with a tablet's local *HTTP* server using *Golang* and *Typescript*;
- Added the project to the *awesome-remarkable* list, responded to community feedback and fixed bugs.

### game-of-life

- Improved implementation for *Conway's Game of Life* mathematical simulation by writing a client in *Rust* & *Javascript*, ensuring memory safety and supporting mobile devices;
- Optimized time usage by using *Hashlife* high-performance algorithm and running it on a separate thread, allowing to render millions of state updates per second;
- Shared technical details by writing an explanation blog and implementing integration tests.

### shorturl

- Made a website for sharing short URLs supporting up to 1200 requests per second;
- Prevented possible *XSS attacks* by using *html/template* library in *Golang* supporting *HTML escaping*;
- **(In progress)** Improved privacy by implementing *passkey* authentication for accessing the short URL code.

### raytracing-bench

- Measured performance of 3D sphere raytracing renderers in *Java*, *Python*, *Numpy*;
- Achieved 7x – 993x speedup compared to the *CPU*-based renderers by migrating to the *CUDA* architecture;
- Contributed to the *TornadoVM* computation project by reporting an issue and writing an installation guide for a specific platform.