

Omri Bornstein

Software Engineer

Go/Linux enthusiast, curiously seeking challenges & professional development

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Education

2020 — 2023 **Bachelor of Computer Science**, [Monash University](#), Melbourne

Skills

- **Programming Languages:** Go, JavaScript/TypeScript, Python, Kotlin/Java, C/C++
- **Tools:** Git (with GitHub/GitLab), MongoDB, **Docker**, **Terraform**, gRPC/Protocol Buffers, [Hugo](#)
- **Platforms:** **Linux**, **cloud-native**, web servers/browsers, macOS, Windows, Azure, Firebase
- **Design & Implementation:** algorithms & data structures, object-oriented programming, test-driven development
- **Hobbies:** [playing guitar](#), listening to/analysing music, self-directed learning, personal projects

Experience

Monash Cyber Security Club (MonSec)

2023 **President**, [Terraform](#), [Azure](#), [Git](#), [Hugo](#)

- Involved with industry relations for the purposes of sponsorship deals and collaborations.
- Overhauled the [club's website](#) for greater usability.
- Assisted in adding more Azure infrastructure and an automation pipeline to the [club's CTFd server](#) with [Terraform](#) and [GitHub Actions](#).
- Organised and ran an introductory-level [workshop](#) about command-line Linux.

2022 Q3—Q4 **Vice President**

- Coordinated collaboration with the university's [Faculty of IT](#) for purposes of events and advertising.
- Organised and ran an introductory-level [workshop](#) about [steganography](#).

2022 Q1—Q2 **Secretary**, [Python](#), [Git](#)

- Wrote a custom Jupyter notebook for membership base analysis and reporting purposes.
- Organised and ran an introductory-level [workshop](#) about binary reverse-engineering.
- Wrote a guide on the [resources page of the club's website](#) on how to easily install and set-up a [Kali Linux](#) virtual machine.

2021 Q3—Q4 **Assistant Member Training Officer**

- Helped to organise and ran a workshop about brute-forcing tools used for penetration testing.
- Assisted in the club's management and operations.

Research

2023 **Research Assistant**, Monash University's [FIT3144 unit](#), [JavaScript](#), [Python](#) & [Git](#)

[Extended \(available on GitHub\)](#) a browser-based tool (Wagner et al., 2023) used for building evolutionary algorithms in educational settings. Supervised by [Dr. Markus Wagner](#).

2021 Q3—Q4 **Research Assistant**, Monash University's [FIT2082 unit](#), [C/C++](#), [Python](#) & [Linux](#)

- [Contributed \(available on GitHub\)](#) to an [existing codebase](#), based on prior research (Gange, Harabor and Stuckey, 2021) about [Lazy CBS](#), a [Multi-Agent Path Finding](#) (MAPF) algorithm.
- Built with C/C++ and [Python](#) for Linux-based platforms. Supervised by [Dr. Daniel Harabor](#) and [Dr. Mor Vered](#).

Freelancing

2023 Q3—Q4 **Associate Software Engineer**, [Radio Monash](#), Clayton, volunteering

Advised the leadership team on software deployment and server migration of their audio stream.

2021 Q3—Q4 **Software Engineer**, [Contract](#), Melbourne, [Go](#) & [test-driven development](#)

Implemented a custom asynchronous fault-tolerant file back-up system that enables the continuation of file transferring from a variably-approximate point in time before the disruption. Available at [AppleGamer22/rb on GitHub](#).

Open-Source Projects

since May 2022 **raker**, [AppleGamer22/raker on GitHub](#), [Go](#), [Docker](#) & [MongoDB](#)

A social media scraper that is interfaced via a server-side rendered HTML user interface (or a CLI), and is managed by a REST API and a NoSQL database. I presented this project at [Melbourne's Go meet-up](#).

since May 2022 **stalk**, [AppleGamer22/stalk on GitHub](#), [Go](#), [Linux](#) & [macOS](#)

A cross-platform file-watcher that can run a command after each file-system operation on a given set of files or simply wait once until a file is changed.

since January 2022 **cocainate**, [AppleGamer22/cocainate on GitHub](#), [Go](#), [macOS](#) & [Linux](#)

A cross-platform re-implementation of the macOS utility [caffeinate](#) that keeps the screen turned on either until stopped, for a set duration of time or while another process still runs.

2020 — 2021 **sp**, [AppleGamer22/sp on GitHub](#), [Kotlin](#)/[Java](#)

A [Minecraft server plugin](#) that enforces password authentication on player before allowing client-server interaction.

2019 — 2022 **scr-web**, [AppleGamer22/scr-web on GitHub](#), [TypeScript](#), [Angular](#), [Docker](#) & [MongoDB](#)

My previous attempt at building a full-stack (and a CLI) social media scraper with a single-page website framework and a RESTful server.