

# Omri Bornstein

Software Engineer

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Updated on **2023-07-01**

## Education

2020 — In Progress **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](#)
- **Platforms:** [Linux](#), [cloud-native](#), [web servers/browsers](#), [macOS](#), [Windows](#)
- **Design & Implementation:** [algorithms & data structures](#), [object-oriented programming](#), [test-driven development](#)
- **Soft Skills:** [technical writing](#), [critical/analytical thinking](#), [presenting/public speaking](#), [research](#), [troubleshooting/debugging](#), [explaining](#), [collaboration/teamwork](#)

## Experience

### [Monash Cyber Security Club](#) (MonSec)

2023 **President**

- Involved with industry relations for the purposes of sponsorship deals and collaborations.
- Overhauled the [club's website](#) for greater usability.
- Organised and ran an introductory-level workshop about command-line [Linux](#) (a recording is available on [YouTube](#)).

2022 Semester 2 **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](#) (a recording is available on [YouTube](#)).

2022 Semester 1 **Secretary**

- Organised and recorded official committee and club meetings.
- Organised and ran an introductory-level binary reverse-engineering workshop (a recording is available on [YouTube](#)).
- 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 Semester 2 **Assistant Member Training Officer**, [Monash Cyber Security Club](#) (MonSec), Melbourne

- 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 Semester 1 & 2 **Research Assistant**, [Monash University's FIT3144 unit](#), [JavaScript](#)

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

2021 Semester 2 **Research Assistant**, [Monash University's FIT2082 unit](#), [C/C++](#), [Python](#) & [Linux](#)

- [Contributed](#) 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 [Daniel Harabor](#) and [Mor Vered](#).

## Freelancing

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.

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.