

# Omri Bornstein

## Software Engineer

Go & Linux enthusiast curiously seeking challenges & professional development Updated on **2023-08-27**

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🌐 [applegamer22.github.io](https://applegamer22.github.io)  
in [omri-bornstein](#)  
🎮 [AppleGamer22](#)

## Education

2020 — Expected 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**, [Hugo](#)
- **Platforms:** **Linux**, **cloud-native**, web servers/browsers, macOS, Windows, Azure, Firebase
- **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
- **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.
  - Organised and ran an introductory-level [workshop](#) about command-line Linux.
- 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](#).
- 2022 Semester 1 **Secretary**, [Python](#), [Git](#)
  - Wrote a custom Jupyter notebook for membership base analysis.
  - 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 Semester 2 **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 Semester 1 & 2 **Research Assistant**, Monash University's [FIT3144 unit](#), [JavaScript](#)
  - [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 Semester 2 **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

- 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 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.