Omri Bornstein

Software Engineer

Go & Linux enthusiast
couriously seeking challenges & professional development

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AppleGamer22

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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
- **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 Semster 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 about workshop 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, 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 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

2023 Semester 2 **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.

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.