JONATHAN MOALLEM

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EXPERIENCE

Gameloft Brisbane — **Mid-Level Gameplay Programmer**   06/2022 – PRESENT

Caps Collective — **Programmer, Designer & Co-Founder**   02/2020 – PRESENT

- Developed several games and software projects in Unity, Godot and Unreal, as well as developing a custom game engine in C++ as part of an open source developer collective

- Led and managed a team of part-time developers to publish a 3D city-builder game, *Fantasy Town Regional Manager*, on Steam, selling 1000+ copies in its first week, and listed by Kotaku Australia as one of the top 10 Australian games of 2021 (***see portfolio on page 2***)

Animal Logic — **Pipeline Software Engineer**   03/2021 – 05/2022

- Developed and maintained VFX pipeline systems in Python and C++ for libraries, applications, and DCC plugins based on Pixar's *USD* 3D scene description format

- Delivered and supported high-quality, maintainable code against quarterly schedule, while working to proactively improve the health of the codebase across productions

- Collaborated with on-site and remote (Vancouver) team, participating in regular code review, agile development practices, and working to improve test coverage

- Contributed to architectural design of core functionality (such as asset resolution), and open sourcing of Animal Logic's Maya USD plugin to Autodesk's public repository

Foreign Brief — **Android Developer**   11/2017 – 10/2019

- Led development of Android app and consulted web API restructure for v2 overhaul

U:PASS UTS — **Programming Tutor**   03/2018 – 06/2018

- Tutored students on MVC architecture and UI programming patterns in Java

Sentia — **Junior Rails Developer**   01/2017 – 01/2018

- Built out and maintained several Ruby on Rails web-apps for enterprise clients

Sudo-Code Software — **Technical Designer & Co-Founder**   09/2014 – 03/2019

- Released a mobile game, *Pongagon*, attaining over 20,000k downloads on iOS alone

- Led a team of three developers, managed client interaction, and handled UX&I design

Interactive Investor — **Junior Web Developer**   11/2015 – 08/2016

- Developed Wordpress annual reporting sites for corporates, such as Telstra and Westfield

EDUCATION

University of Technology Sydney — **Bachelor of Science (Honours) in IT** (87.09 & 98.43 WAM)   2016 – 2020

- Thesis on emergent narrative, game AI techniques and engineering practices

- Published original research to IEEE Conference on Games in AI & interactive drama

- Graduated with high distinction (98.43 WAM), earning university medal

George Mason University, Virginia — **Computer Science** (Academic Exchange)   2018 – 2019

TECHNICAL SKILLS

Programming Languages

C/C++	Python	Java	Ruby	Bash
C#	Lua	JavaScript	GDScript	Crystal

Frameworks & Libraries

Unreal Engine	Godot Engine	Maya API	iOS SDK	Qt
Unity Engine	Pixar USD	GitHub Actions	Android SDK	Ruby on Rails

Misc.

Photoshop	Git	Jira	Trello	Video Editing	UX&I Design	Narrative Design	Music Productuction	Data Analytics

PORTFOLIO

Fantasy Town Regional Manager

Built a fantasy card-based, town-builder game in **Unity** part time with a small team, listed by Kotaku Australia as one of the **top 10 Australian games of 2021**

store.steampowered.com/app/1524530

Run for Covert

Built a fully **procedurally generated**, **online multiplayer**, tactical FPS in **Unreal Engine**, with **HFSM-based AI** and **intelligent cover system**

caps-collective.itch.io/run-for-covert

A Review of Agency Architectures in Interactive Drama Systems

Published an **academic paper** on **interactive drama & AI** in the 2020 **IEEE Conference on Games**

ieeexplore.ieee.org/abstract/document/9231655

A Dark Discomfort

Built a **custom C++ game engine** based on **Vulkan** with unit testing and a **CI/CD pipeline** for testing cross-platform builds and release management

github.com/CapsCollective/a-dark-discomfort

Raylib C++ Starter Kit

Built a lightweight, portable, automated template for **raylib game engine library** projects with **C++ bindings**, using **Make** and **CI/CD tooling**

github.com/CapsCollective/raylib-cpp-starter

Daily Brief

Built versions 1.0 and 2.0 of a commercial **Android app** for daily geopolitical updates with **subscription features**, including **tags**, **search**, and **map-view**

play.google.com/store/apps/details?id=com.foreign_brief.daily_brief

Check out my Github (@J-Mo63), and personal website (jonathanmoallem.com) to see more projects

OTHER ACHIEVEMENTS & HONOURS

• Achieved University of Technology Sydney's **engineering faculty Dean's List across 2017, 2018, and 2021**

• Won the **Game Narrative Review Gold Award** for paper **presented at GDC San Francisco**

• Selected as one of 11 amongst 8000+ students across Australia as one of **AFR's Top 100 Future Leaders** for technology

• Completed **12 games in 12 months** challenge, **winning best-in-showcase awards for three separate entries**