JONATHAN MOALLEM

Mobile: +61 450 500 490   **Email:** jdmoallem@icloud.com   **Personal Site:** jonathanmoallem.com
LinkedIn: linkedin.com/in/jmo63   **Twitter:** @JonJonRespawned   **Github:** github.com/J-Mo63

EXPERIENCE

Animal Logic — **Pipeline Software Engineer**   **03/2021 – PRESENT**

- 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

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*)

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

- Undergrad focussing on web and mobile apps development as well as interaction design

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

TECHNICAL SKILLS

Programming Languages

C++	Python	Lua	Swift	JavaScript	Dart	PHP
C#	C	Java	Ruby	GDScript	Crystal	Rust

Frameworks & Libraries

Unreal Engine	Qt	Maya API	iOS SDK	Node.js
Unity Engine	Pixar USD	Docker	Flutter	Ruby on Rails
Godot Engine	LÖVE 2D	Android SDK	React.js	Django

Misc.

Photoshop	Git	Trello/Jira	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 **raylib** 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**