

ALI EL SALEH

Education

Ultimo, NSW

[The Academy of Interactive Entertainment](http://TheAcademyofInteractiveEntertainment.com)

Feb 2018 – Dec 2018

- **Certificate:** Diploma of Digital and Interactive Games (Programming)
- **Programming Coursework:** Code Design & Data Structures, AI for Games, Cross-platform dev, Production-Planning, Production, Physics for Games

Software Projects (Personal)

Personal Website: alielsaleh.com (for additional information and projects)

Cipher Encryptor (available at alielsaleh.com for download)

- Developed a WinForms application using C# that allows users to encrypt their message using a cipher method.
- Implemented 3 cipher methods: Caesar Shift, ROT1 and Transposition.
- Implemented error checks when a file is not valid and when the program cannot encrypt.
- Implemented the drag n' drop feature for dragging a valid file into the program.
- Created formulas for each of the cipher methods: Caesar Shift, ROT1 and Transposition.
- Designed the Cipher Encryptor UI.
- Utilised: C#, .NET Framework, WinForms, Visual Studio

Game Projects

Cosmic Hell (available at alielsaleh.com for download)

- Created a Bullet-hell shooter game in C++ using the Raylib framework.
- Implemented the flocking algorithm for flying enemy types.
- Templated the flock class to be used with any user defined object, not just enemies.
- Created and animated all art assets.
- Designed a bullet pattern generator (with 30 pattern types) that can be used with any class.
- Won AIE's holiday coding challenge and received 8 games (4 from past AIE students, 4 AAA games) as a reward.
- Utilised: C++, Raylib, Visual Studio, GitHub, Photoshop

5329 Goblins (available at github.com/TeamAJACKS/5329-Goblins for download)

- A production project with a team of 5 people (3 Artists, 1 Designer and 1 Programmer(me)), created a game for the final assessment of Year 1 in 6 weeks using Unreal Engine and C++.
- Programmed all the gameplay mechanics and UI Logic using Unreal's API in C++.
- Designed the first level and the boss level using the Unreal Editor.
- Integrated GitHub with the project for source control.
- Developed the AI for all enemy types in the game.
- Implemented a Behaviour Tree logic for all goblins.
- Utilised: Unreal Engine, C++, Visual Studio, GitHub (for source control).

Skills

- **Software:** (proficient) C++, C#, Git, Unreal API (familiar): HTML/CSS