

Alistair Cormack

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Profile

Several years' experience as an independent Software Developer with a portfolio of commercially published and highly recognised work. Years of contributing to teams in both an office environment, and on passion projects such as games and tutorials. Particular focus in agile interactive software development, including games, cross-platform mobile apps and cms powered websites. Always looking for a challenge to push my boundaries, and constantly researching new and exciting technologies to use in my work.

Education

- **First Class MEng in Computer Science with Artificial Intelligence, University of York**
 - *Interactive Applications*: A focus on understanding human computer interaction and the creation of games, apps and other interactive media.
 - *Multi Agent Games*: Study of the mathematics behind agent driven games and the use of this to develop intelligent AI systems.
 - *Low Level Engineering*: A broad knowledge of the underlying mechanisms which drive computation, including detailed memory management and optimisation techniques.
- **Modules:**
 - *Interactive Application Programming Techniques* : 94%
 - *Adaptive and Learning Agents* : 93%
 - *Information & Coding Theory* : 74%
 - *Systems Software & Compilers* : 76%
 - *Human Computer Interaction* : 77%
 - *Cryptography Theory & Applications* : 94%
- **Computer Vision and AI**: My [master's dissertation](#) dealt with autonomous navigation of robots in unknown environments. This required thorough research in computer vision and AI, and the use of complex techniques to identify and correctly build a dynamic classifier. Specifically image noise reduction, the detection of salient image features, feature matching algorithms and vocabulary based machine learning algorithms were used.
- **AABB** – A Levels including Further Maths and Physics

Technical Skills

- **Languages** : Objective-C, Swift, C++, Python, Ada, Java, Javascript, SASS, PHP, SQL, C
- **Frameworks** : KinectSDK, Unreal 4, Cocoa, AndroidSDK, PhoneGap, Unity, web2py, Phaser,
- **Concepts** : Unit and Systems Level Testing, Internationalisation, Program Architecture
- **Software** : Visual Studio, Eclipse, Atom, XCode, MatLab, Flash, Photoshop, Git
- **Systems** : Windows, OSX, Linux, Raspbian

Experience

- **Interactive Software Engineer**: Over a year's work as an independent iOS developer for companies such as [The Distance](#). Worked on numerous large scale projects spanning from HTML5 games to textual glyph recognition in C# during a yearlong industrial placement at [Eden Agency](#). Each project involved meeting clients, working out our shared goals, establishing deadlines and regularly updating them on progress.

- *Large Scale Projects*: Worked closely with fellow developers on several apps that involved back-end CMS development alongside front-end UI for iOS.
- *Client Relations*: Organised and met with clients regularly to discuss their needs, form new partnerships and open up possibilities.
- **Game Design**: Designed, illustrated, programmed, and managed an independent [game](#) which was later sold to Nickelodeon. This is on top of 8 years game design experience, with several receiving sponsorship from publishers. Currently working with Unreal 4.
- **Science**: Work Experience at [Diamond Light Source Synchrotron](#). Spent my time there learning about the complex mechanics and physics in action within the particle accelerator, as well as assisting in various research experiments. I was also tasked with developing a Python user interface for company wide distribution which is still in use.
- **Organiser/Director**: Organised one of the internet's largest tutorials on Flash and the ActionScript language. This involved directing over 50 authors across the globe, assigning specific areas of teaching, and collating this with a centralised framework. Up to now this has had over half a million views.

Personal

- Game Design/Development - Experimentation with novel gameplay concepts using readily available engines (Unity/UE4).
- Compete in Fencing at a national level, armourer and merchandise liaison for York Fencing Club.
- Design and Illustration

References

Dr Nick Pears

Senior Lecturer In Computer Vision
 University of York
 Heslington, York YO10 5DD
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Anthony Main

Managing Director
 The Distance
 52 Skeldergate, York YO1 6DS
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Availability

Available for work from 3rd October 2016
 Looking for positions anywhere in the UK and Europe