

## education

### phd | computer science

university of strathclyde | 2006-2010

- research: machine learning and AI for games
- advisor: Dr John Levine

### msc | artificial intelligence

university of edinburgh | 2006

- graduated with distinction

### bsc (hons) | computer science

university of strathclyde | 2005

- graduated with first-class honours
- foreign exchange year in USA

## skills

### languages

C# • Java • Objective-C  
C++ • C • Python  
SQL • JavaScript • R  
R • Matlab • Prolog

### tools

Unity • Visual Studio • Eclipse  
Adobe Premiere Pro • Adobe Photoshop  
SVN • MonoDevelop • Unreal Engine 4  
XCode • Wwise Adobe After Effects  
Adobe Audition • Adobe Illustrator  
Perforce • GitHub



### operating systems

Windows XP/8/10 • Linux • macOS

## shipped projects


*VR Training Project* (Myriad Global Media)  
(March 2019)

*Sure Footing*

- Steam (March 2018) 
- Itch.IO (March 2018) 
- Xbox One (TBA 2019)
- Nintendo Switch (TBA 2019)

*Nomura Research* (App Store - June 2011)

## research publications

Over 30 peer-reviewed research papers in fields of machine learning and artificial intelligence for games. 

## experience

### opensignal | consultant

march - august 2019

- Consultation for work on game-AI related projects.

### myriad global media | contract programmer

february - march 2019

- Virtual reality training simulation developed with Unity & HTC Vive.
- Short-term contract to help project meet launch-date.

### four circle interactive | contract gameplay programmer

october 2017 - january 2019

- Gameplay programmer on unannounced project.
- Built new AI tools and systems for non-player character AI
- Developed systems for modular procedural asset generation and testing

### table flip games | co-director and programmer

september 2015 - present

- Co-founded independent game studio to work on personal projects
- Developing titles in Unity and Unreal Engine
- Running educational workshops for companies, schools/colleges and district councils.

### anglia ruskin university | senior lecturer (fractional)

october 2017 - present

- Lecturing position in a 0.2 fractional capacity (i.e. one day a week)

### anglia ruskin university | senior lecturer in computer science

january 2016 - october 2017

- Teaching object oriented programming for games (C# and C++), game engine programming, AI for game development.
- Course leader for MSc Computer Games Development (2016-17 AY)

### university of derby | lecturer in computer science

january 2012 - january 2016


- Teaching object oriented programming for games (C# and C++), game engine programming, AI for game development.
- Course leader for BSc Computer Games Programming (Sep 2012 - Sep 2015)


### scott logic | software developer

october 2010 - january 2012

- Developer on Apache Flex project for Barclays Investment Bank
- Lead developer on iOS project for Nomura Holdings inc
- Responsible for graduate recruitment & training on projects targeted for mobile devices

## side projects

*AI and Games* (YouTube Series) 

- Video series on research and applications of artificial intelligence in video games.
- Started in 2014, with over 4 million views and 85K subscribers.
- Crowdfunded on Patreon. 

## hobbies & interests

sports

weight lifting • distance running

arts

fiction novels • comic books

pencil sketch artist • guitarist

## experience (ctd)

**equiwork ltd.** | **contract developer**

jun 2008 - october 2009

- Web development expanding existing PHP/HTML site with new SQL intergration and features.

**university of strathclyde** | **graduate teaching assistant**

october 2006 - may 2010

- Taught numerous classes in undergraduate computer science curriculum.
- Responsible for handling student queries and management of practical classes.

