sean butler curriculum vitæ

engineering leader, game developer and academic butlersean@gmail.com

PROFILE

soft skills

tech & creative team leadership training, pastoral care written, visual & verbal comms scheduling & estimation project management, agile certified scrum master

tech skills

c/c++ c# opengl unity, unreal & in-house engines console and mobile development llvm, v8, DSLs, compilers etc python, js & various web tech ai, pcg & computational creativity

WORK EXPERIENCE

sept 2021 – now lead programmer, ubisoft

owning multiple significant core technical features including custom visual programming language and backend linear solver for simulation. direct and indirect reports across multiple teams of programmers. involved in shaping the process and technology of the wider project. work with stakeholders across multiple sites and projects.

sept 2016 – sept 2021 senior lecturer, uwe

senior lecturer games technology. research grant funding, modules written & lead, etc

march 2015 – aug 2016 founder, truckulus

mobile fleet tracking and loads brokerage project for haulage industry. an innovative saas approach to the backloads problem for large numbers of small hauliers. angel funded.

feb 2013 – march 2015 game director, soshi games

responsible for day to day running of several mobile projects from concepts by ceo. reporting to the ceo & board. vc funded for music industry game concepts.

 $\begin{array}{c} {\rm feb~2011-feb~2013} \\ {\rm programmer,~happy~little~aliens} \end{array}$

self funded micro studio focussing on non-violent iOS games. designed and developed 2 iphone games with a distributed team of collaborators.

jan 2005 – feb 2011 lead programmer, game designer, behaviour created designs in fast paced short duration projects and big budget titles. contributed to pitches winning over \$10M in funding across multiple platforms. earlier, lead team of programmers using c++ on the nintendo ds. scoped and scheduled coding. designed and implemented an entire range of in game agents and systems. interviewed new hires. consulted by senior management on all aspects of game development.

nov 2003 – jan 2004 consultant, johnson county community college worked with faculty on associates degree curriculum. provided course content and materials for programming, design, and related modules. advised on choice of texts. provided PR presentations.

sept 1997 – mar 2003 lead gameplay programmer, argonaut

led team of gameplay programmers. maintained and extended in house scripting language. interviewed, reviewed and guided junior programmers.

jan 1997 – sept 1997 programmer, simtex (uk) ltd wrote physics routines for a futuristic xlr8 pc motorcycle race game. implemented an opengl world viewer allowing staff to check mesh, textures, lighting, etc.

sept 1996 – dec 1996 programmer, blitz games programmed the sound library for use in / wargames on the ps1. designed and implemented a hierarchical polygon subdivision code for use in glover on the ps1.

sept 1995 – sept 1996 lecturer, department of computing, middlesex university wrote the uk's first undergraduate b.sc. games development courses using psx console hardware, publicity generated reached national media. introduced self peer appraisal to promote reflection as an aide to learning. wrote, taught and examined four modules across the computing track, including programming interactive graphics systems, c++ programming, database systems and foundations of computing.

GAMES

console/pc unannounced title lead programmer iOS / android queen: the game game director iOS / android weld hero (totem) project manager arriva bus town html5 game director clue the music iOS / android game director music festivals Facebook game director iOS meteor storm escape programmer indigo bunny iOS programmer ghostbusters nintendo 3ds pitch & original concept disney brave ps3, xbox, wii, ds pitch & original concept wipeout 2 nintendo ds game designer transformers 3 wii 3ds & ds pitch & original concept rango iOS game designer iOS naughty bear portable pitch & original concept mysims sky heroes nintendo ds script designer my sims agents 2 (cancelled) nintendo ds game designer twilight (cancelled) nintendo ds game designer game designer mysims racing ds nintendo ds the mummy 3 ds nintendo ds game designer nintendo ds indiana jones & the staff of kings lead programmer

kim possible 6 nintendo ds additional programming monster house nintendo ds additional programming suite life of zack & cody: tipton trouble nintendo ds lead programmer kim possible 4 nintendo ds additional programming scooby doo unmasked game programmer nintendo ds malice xbox & ps2lead game programmer xlr8pc & arcade programmer wargames programmer psx glover psx & n64 programmer

GAME AWARDS

2010, finalist best handheld game, also nominated best game design, canadian video game awards, my sims racing ds

2007, winner multimedia technical innovation, alliance numerique, suite life of zack & cody

REFEREED PUBLICATIONS

salge, c. et al. (2022) impressions of the gdmc ai settlement generation challenge in minecraft. foundations of digital games, athens, greece.

butler, s. & parkes, a. (1997) film sequence generation strategies for generic automatic intelligent video editing, special issue on entertainment and ai/alife of applied artificial intelligence (aai).

butler, s. & parkes, a. (1996) automatic film editing by filmic decomposition of non-filmic queries. international conference on multimedia technology and management (icmtm), hong kong.

butler, s. & parkes, a. (1996) spacetime diagrams for film structure representation. signal processing: image communication, volume 8 issue 4.

parkes, a. p., nack, f., and butler, s. (1994) artificial intelligence techniques and film structure knowledge for the representation and manipulation of video. proceedings of riao 1994, intelligent multimedia information retrieval systems and management. vol. 2. rockefeller university, new york.

butler s., and parkes, a. p. (1994) intelligent strategies for the presentation of video in intelligent tutoring systems. educational multimedia and hypermedia annual. ed-media 94, vancouver.

OTHER PUBLICATIONS

butler, s. et al. (2021) exploring mapping functions and generative methods for procedural level generation from designer curves.

butler, s. (2020) Clarification of Video Retrieval Query Results by the Automated Insertion of Supporting Shots.

butler, s. (2019) Throwing Things. Seeds: Proczine ed: Jupiter Hadley & Dann Sullivan.

SCHOLARLY ACTIVITY, GRANTS, ETC

2020, gpt2 generated digital postcards and poems, co applicant, heritage wales & artstation, generated from artifacts discovered during tourist visits to flat holm.

2020, evolutionary game mechanic discovery, coevolution genetic programming game mechanic discovery, principal applicant / genetic programming over a c-like language within a realtime simulation which developed into an ensemble evolution study

2020, PROCJAM organiser, part of the team which set up and ran this well attended procedural content generation games jam

2020, Generative Minecraft Design Competition, judge / experience of minecraft and ai coupled with non-participation qualified me as a judge for this international pgc/ai competition.

2019, reviewer, INTERACT 2019 Conference

2019, reviewer, ICGI Conference

2019, machine learning for video game level design, principal applicant / hybrid methods montecarlo tree search and neural network for level design using surrogate model and playing agent for gameplay evaluation.

2018, web and mobile 3d visualisation, heritage wales & art station / co applicant / web and mobile 3d visualisation using real world data and historical multimedia of heritage sites in south wales.

EDUCATION

1992 - 1996 postgraduate ai and cinema theory (incomplete), lancaster university

developed a prototype ai system that uses a subset of filmic principles to automatically create a "correct" film sequence from a library of annotated mpeg files. basically a film editing expert system. queries can be expressed with a simple syntax, and contain no film editing information. developed novel user interface for digital video editing, based on model of video editors at work. taught motif/osf x-windows programming to undergraduates.

1989 - 1992 computer science b.sc. (hons), lancaster university awarded an upper second. studied computer science, software engineering, human computer interaction. also psychology and maths. ran speleology society.

PERSONAL

family, travel, making things, tech, the outdoors, video games. full british driving license. references available on request. married to an american citizen.