

sean butler

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building team success through empathy, transparency and nurturing

SKILLS

- team leadership & engineering management
- feature and product ownership
- teaching & training
- coaching & mentoring
- pastoral care
- quality written, verbal & visual comms
- scheduling & estimation
- certified scrum master
- mental health first aider

TECHNOLOGIES

- c++ c# & c
- mobile & console game development
- in-house engines, unity & unreal
- linux, lex, yacc, compilers & llvm
- js, v8 & variety of web tech
- jira & automation
- python & assorted libraries
- OOD, TDD, patterns, UML, etc
- gof ai, pcg, gpu shaders etc
- embedded (SPI, I2C) arduino & rp2040

EXPERIENCE

arm, cambridge – staff engineer & team lead, sept 2023 – now

product owner for GPU compiler, team lead and line manager to 13 people across 3 teams in 2 different countries. part of initiative developing data driven back end for software engineering processes. coaching peers and directs. career development, anticipating promotions for 2 people in next 6 months including one inherited and brought up from remedial action.

ubisoft, leamington spa – lead programmer, sept 2021 – sept 2023

team lead for two main core tech features, custom visual programming language and backend global game strategic ai. 12 direct and indirect reports across two teams of programmers. shaped the processes and technology of the project. work with stakeholders across multiple sites and projects. grew a disillusioned team to happy and high performing. coached individual from needs improvement to high performing on core skills. mental health first aider.

uwe, bristol – senior lecturer, sept 2016 – sept 2021

various procedural content generation research projects, grant funding. game technology modules specified, written & lead. teaching 50-70 students at a time while providing guidance to multiple group projects in parallel. academic personal tutor, helping students confidentially with their personal problems.

truckulus, birmingham – owner march 2015 – aug 2016

angel funded startup. mobile fleet tracking and loads brokerage project for haulage industry. saas approach to backloads management for small hauliers. pitched for external funding and to clients. hired staff, managed devs, etc.

soshi games, birmingham – game director, feb 2013 – feb 2015

reporting to the ceo & board. vc funded startup for music industry game concepts. responsible to improve final quality and monetization of existing live games. stepped in to cover management in absence of producer. rolled out creative direction of high level concepts from owner to multiple small teams.

happy little aliens, birmingham – programmer, feb 2011 – feb 2013

self funded micro studio focusing on non-violent iOS games. designed and developed 2 iphone games. collaborated with distributed team via internet.

behaviour interactive, montreal – lead programmer, game designer, jan 2005 – feb 2011

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. etc.

johnson county community college, kansas city – consultant, 2004

worked with faculty on associates degree curriculum. provided course content and materials for programming, design, and related modules. participated in community outreach presentations.

argonaut, london – lead gameplay programmer, sept 1998 – mar 2004

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

simtex, farnham, uk – programmer, jan 1998 – sept 1998

wrote physics routines for a futuristic motorcycle race game. implemented an pc opengl world viewer allowing staff to check mesh, textures, lighting, etc.

blitz games, leamington spa – programmer, sept 1997 – dec 1997

programmed the sound library for use in wargames (psx). designed and implemented hierarchical polygon subdivision code for use in glover on the (psx).

middlesex university, london – lecturer, sept 1996 – sept 1997

created the uk's first undergraduate games development course using psx console hardware, predating sonys playstation first initiative by years. publicity generated reached national media. wrote, taught and examined multiple modules across the computing track, including using opengl and c++.

PUBLISHED GAMES

unannounced ubisoft title	console/pc	lead programmer
queen: the game	mobile	game director
weld hero (totem)	mobile	project manager
arriva bus town	facebook	game director
clue the music	mobile	game director
dj of the dead	mobile	game director
music festivals	facebook	game director
meteor storm escape	iOS	programmer
indigo bunny	iOS	programmer
ghostbusters	nintendo 3ds	pitch & original concept
disney brave	ps3, xbox, wii	pitch & original concept
wipeout 2	nds	game designer
transformers 3	wii 3ds & ds	pitch & original concept
rango	iOS	game designer
naughty bear portable	iOS	pitch & original concept
mysims sky heroes	nds	script designer
my sims agents 2 (cancelled)	nds	game designer
twilight (cancelled)	nds	game designer
mysims racing	nds	game designer
the mummy 3	nds	game designer
indiana jones & the staff of kings	nds	lead programmer
kim possible 6	nds	additional programming
monster house	nds	additional programming
suite life of zack & cody: tipton trouble	nds	lead programmer
kim possible 4	nds	additional programming
scooby doo unmasked	nds	game programmer
malice	xbox & ps2	lead game programmer
xlr8	pc & arcade	programmer

wargames
glover

psx
psx & n64

programmer
programmer

AWARDS

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

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

PEER REVIEWED 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 nonfilmic 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

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

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. published papers in multiple journals.

b.sc. (hons), computer science – lancaster university, 1989 – 1992

awarded an upper second. studied computer science, software engineering, human computer interaction. also psychology and maths. ran speleology society.

LINKS

[linkedin](#) | [github](#) | [moby games](#) | [google scholar](#) | [orcid](#) | [dblp](#)

PERSONAL

family, travel, making things with wood and/or electronics. tech, the outdoors, video games. full british driving license. references available on request. married to an american citizen, right to work in usa. no criminal record.