Level Design Workshop

USC Games, CTIN-478 Spring Semester 2024

Professor:

Richard Lemarchand

Email: rlemarchand@cinema.usc.edu

Office: SCI 201 L

Office hours (by appointment only): Tuesdays, 2pm to 5pm Los Angeles time

Student Aide:

Marielle Brady Email: TBD

Office hours (drop in times): day and time TBD

Meeting Information:

Room: SCI 206

Day and Time: Tuesday 10:00 AM - 12:50 PM

Units: 2

Course Website

https://bit.ly/CTIN-478-SPRING-2024

Course Description:

This is an intermediate-level course in level design for videogames. "Level design" is the process of creating environments for videogames in which the events of the game take place. The skills of the level designer including the ability to create spaces that are navigable and legible, that support gameplay of various kinds, that create emotion in players, and that convey narrative through a variety of means.

The course is focused on 3D level design in the Unreal engine, and uses a mixture of readings, viewings, lectures, and practical assignments to achieve its learning goals. There are three major practical assignments: a first solo project focused on first-person level design, a team project focused on third-person level design, and a second solo project that can be either first-person or third-person. Work is typically playtested outside class, and submitted in the form of videos with sound. Students interested in 2D level design may explore it using a constrained third-person camera in the second solo assignment.

The final is to create a portfolio-ready "supercut" video of your work in the class. The course is taught by a professor with two decades of videogame industry level design experience and features guest lecturers.

- Richard Lemarchand, 14 September, 2023

Learning Objectives

What a student is expected to learn and how these goals fit with the USC Games program's learning objectives

You will learn to remember, understand, and apply **game industry-specific terminology as used by working level designers**, with a mixture of readings, viewings, lectures, and exercises.

You will gain the ability to **analyze and evaluate level designs**, of shipped levels in commercial videogames, and of your own and your peers' work created in the class.

You will learn to **create new level designs**, using **an industry-standard level design process**, involving level requirements, ideation, research, logical flow planning, overview mapping, blockout, sound design, whiteboxing, and final art.

You will learn to work **collaboratively** as part of the level design process, engaging in a **playcentric** process of playtesting, peer critique, and group discussion.

Prerequisite(s): CTIN-489 or CTIN-532. D-Clearance issued on interview with the instructor.

Co-Requisite (s): none

Concurrent Enrollment: none

Recommended Preparation: an intermediate level of game and/or interactive media design and development education, including an introduction to Unity.

Course Notes

The Grading Type of this class is "letter grade"

Class information will be posted on the course website. Your grades will be shared with you via email and Blackboard. Copies of lecture slides will not typically be posted on the course website: students are expected to take their own notes in class, in order to develop your ability to capture and retain information in a professional environment. Key class materials will be made available on the course website, at:

https://bit.ly/CTIN-478-SPRING-2024

University guidelines recommend that students do two hours work outside class for every unit the course is worth. Our class is a two unit class; therefore, we expect that you will spend four hours each week outside of class working on your projects and reading, viewing, or playing the class assignments.

I am happy for you to spend more than this minimum amount of time working on the assignments I set. However, uncontrolled overwork in this class—as in our professional lives—is very undesirable, and I do not expect anyone to do more than six hours of class work each week outside of class. If you find that you are working on class assignments for

more than six hours a week outside class, please contact me to discuss how you can make your workload more manageable.

Technological Proficiency and Hardware/Software Required

It is expected that you will work in Unreal Engine 4 or 5 for this class. In-class instruction in Unreal will not be provided, but you will learn the basics of the engine on a self-starting basis as part of the course homework.

Required Readings and Supplementary Materials

The set books for this semester are:

The Level Design Book

by Robert Yang and Andrew Yoder, online, updated ongoing

101 Things I Learned in Architecture School

by Matthew Frederick, MIT Press, 2007.

Supplementary materials listed in the syllabus will be available on the web, as handouts in class or as digital files on the course website.

Specific readings cited below may be subject to change as the semester progresses.

Description and Assessment of Assignments

What kind of work is to be done and how should it be completed, i.e., how the learning outcome will be assessed.

The class consists of a mixture of reading, viewing, written, and practical assignments. Clear and specific time-and-day milestones for each assignment, along with information about how to submit each assignment, will be listed on the course website.

Your work in this class will be assessed according to five assignments:

In-class work

Most weeks there will be a short test in class, where you can demonstrate your understanding of that week's readings and viewings. Each test will be worth a small number of points that will add up to the total grading score available for this assignment.

Practical Assignments

First Solo Project

Following the design process taught in the class, you will work individually to take a set of level requirements, and produce design materials and successive blockmesh videos, to design a short level for a first-person "walking simulator"-style game.

Team Project

Building on the learnings from the first solo project, you will work in teams to collaboratively design and build a multi-part level, passing from a level flow, simple map, and blockmesh to finished art and sound design.

Second Solo Project

Working individually, you will choose from several level requirements and then design and build a level, passing from a level flow, simple map, and blockmesh to final art and sound design.

Each of these practical assignments will be assessed according to rubric laid out in the assignments section of the course website.

Final: Supercut Video

Using the video materials created in class, you will create a "supercut" video with sound that showcases your work.

Assessment and Grading Rubric:

A number of assignment points will be awarded for each assignment, up to the maximum for each assignment shown in the table below.

In-class work	20
First Solo Project	20
Team Project	20
Second Solo Project	30
Final Presentation	10
Total:	100

The assignment points you earn for each assignment will be derived from my evaluation of your work in the context of the assignment rubric specified on the class web page, and will be calculated according to this scale, rounded to two decimal places¹:

http://www.usc.edu/vh/arr/services/grades/gradinghandbook/gradingpolicies.html and from the University of Washington's Faculty Resource on Grading 'Sample UW Grading Guidelines' http://depts.washington.edu/grading/practices/guidelines.html

¹ These grading guidelines are adapted from the USC Office of Academic Records and Registrar 'Definitions of Grades and Marks'

Dorsontage of	Corresponding	
Percentage of	Corresponding	
available points	Grade	
awarded		
0	F	Complete absence of evidence of learning.
60	D	Little evidence of learning. Poor performance in all
		aspects of the assignment.
70	C-	Work of lower than fair quality. Failing grade for
		graduate credit
73	С	Work of fair quality. Minimum passing grade for
		graduate credit
77	C+	Work of satisfactory quality in most of the assignment,
		with the remainder being somewhat substandard
80	B-	Work of satisfactory quality
83	В	Work of good quality
87	B+	Work of high quality in all or most aspects of the
		assignment
90	A-	Work of excellent quality in most aspects of the
		assignment; high quality work in the remainder
93	Α	Work of excellent quality

Your overall grade for the class will be assigned based on the total number of assignment points you earn in the semester (your "Grading Score"), according to this scale:

Grading Score >=	Grade
0	F
60	D
70	C-
73	С
77	C+
80	B-
83	В
87	B+
90	A-
93	А

Course content by class meeting

Class Content	Assignment Due	Assignment Set
Week 1		
Introduction to the course Getting to know each other Level design process and tools overview	Read the syllabus, install Unreal	Unreal warm-up video with sound
Week 2		
Video reviews Level design process 1: level requirements, ideation, research, flow, overview map, blockout, playtesting	Unreal warm-up video with sound	First Solo Project design materials and blockmesh video with sound
Week 3		
Video reviews Level design process 2: lighting 1, whitebox color-coding, sound design, animation, leading players, fall-to-death	First Solo Project design materials and blockmesh video with sound	First Solo Project blockmesh video with sound iteration
Week 4		
Video reviews Level design process 3: lighting 2, renderable geo, world & camera collision geo, boundaries, checkpoints, final art, release candidate	First Solo Project blockmesh video with sound iteration	First Solo Project blockmesh video with sound final
Week 5		
Team presentations on "when went well, what could be improved" Guest lecture Level design technique 1: paths, linearity, overviews, scale, gates (locked and unlocked), interiors and exteriors, paper mapping	First Solo Project blockmesh video with sound final	Level design analysis video with sound

Week 6		
Level design technique 2:	Level design analysis video with	Team Project design materials
lighting 3, env narr	sound	and blockmesh video with
(abstraction), traversal,	Souria	sound
areas, player progression,		Souria
time of day, game		
parameters, test levels		
Team warm-up		
Week 7		
Video reviews	Team Project design materials	Team Project blockmesh video
Level design technique 3:	and blockmesh video with	with sound iteration
thresholds, occlusion,	sound	
hide-and-reveal, visitation,		
touring, affordances and		
legibility, env narr (using		
words)		
Week 8		
Video reviews	Team Project blockmesh video	Team Project final art video
Level design technique 4:	with sound iteration	with sound
design by reduction,		
third-person camera, the		
golden path, breadcrumbs,		
env narr (env language),		
path modulation		
Week 9		
Video reviews	Team Project final art video	Team Project final art video
Guest lecture	with sound	with sound iteration
Level design technique 5:		
framing and composition,		
leading lines, negative space,		
focal points, env narr (places		
tell stories about the past)		
Week 10	Toom Droject final artisides	Cocond Colo Drainat design
Video reviews	Team Project final art video	Second Solo Project design
Level design technique 6:	with sound iteration	materials and blockmesh video with sound
third-person camera and constraints, weather,		With Soulid
branching, landmarks,		
weenies, the critical path,		
pinches, game feel, footstep		
sounds		
3001103		Į

W. J. ss		
Week 11		
Peer reviews Level design technique 7: discernible zones, valves, env narr (elements of drama), loading and unloading levels, the trust contract, water, boundary violation	Second Solo Project design materials and blockmesh video with sound	Second Solo Project blockmesh video with sound iteration
Week 12		
Peer reviews Level design technique 8: use of textures, the squint test, navmesh, pathing, designing spaces for combat, smoke and mirrors, stairs	Second Solo Project blockmesh video with sound iteration	Second Solo Project final art video with sound
Week 13		
Peer reviews Level design technique 9: T-junctions, diving boards and safety nets, liminal spaces, cheating what you can see, living environments, uncovering secrets, compound worlds. Guest lecture	Second Solo Project final art video with sound	Second Solo Project final art video with sound iteration
Week 14		
Second Solo Project presentations 1	Second Solo Project final art video with sound iteration	None
Week 15		
Second Solo Project presentations 2	None	Supercut Video
Final		
-	Supercut Video	-

Additional Policies

Missing an Assignment Deadline, Incompletes

The only acceptable excuses for missing an assignment deadline or taking an incomplete in the course are personal illness or a family emergency. Students must inform the instructor **before the assignment due date** for a deadline extension to be granted. Students who wish to take incompletes must also present documentation of the problem to the instructor or student assistant before final grades are due.

For assignments turned in after the assignment deadline without prior permission from the instructor, a penalty will be imposed equal to 10% of the total available points for the assignment, for each day or part of a day that the assignment is late, up to a maximum of seven days.

Attendance Policy

Punctual attendance at all classes is mandatory. Students arriving more than five minutes late to three classes, more than ten minutes late to a single class, or leaving early, will be marked as having an unexcused absence from class, unless prior permission has been obtained from the instructor. The following guidelines are from the Interactive Media & Games Division handbook regarding absences and grading and apply to all students.

Guidelines for absences affecting grading

- Two unexcused absences: lowers grade one full grade point (for example, from A to B)
- Three unexcused absences: lowers grade two full grade points
- Four or more unexcused absences: request to withdraw from course (instructor's discretion)

Additionally, we may ask you to withdraw if your total absences become excessive, even if they are excused.

The only excused absences are for illness, family emergencies, and (with advance notice) commitments related to a scholarship you are receiving, e.g. for a varsity sport or commitments related to your professional practice, such as to attend a festival where you are showing a game or a conference where you are speaking. You must contact us as soon as possible regarding your absence. Generally, we will expect to hear from you before class; in exigent circumstances I would expect to hear from you within 24 hours. If we do not hear from you in a timely fashion you may forfeit your option to make up what you have missed.

All that said:

- 1. **If you are sick, stay home.** You need to be healthy to learn, and so do your classmates (and instructor).
- 2. We do not distinguish between mental health and physical health. If you cannot complete an assignment on time or come to class because of mental health issues, you must contact us promptly, just as with physical health problems. See the Support Systems section below for additional information.

Social Media Use in Class

Social media use, including text messaging, Internet messaging and email, is not permitted in class unless explicitly permitted by the instructor. A 0.5% grade reduction will result from each occurrence of a student being found using social media in class.

Video and Audio Recording in Class

Video and audio recording during class meetings is not permitted, except by prior arrangement with the instructor and the class members.

Content Warnings

If you include content in the work that you produce which may cause distress to your fellow students, please tell me (the instructor) before showing the work in class and make a verbal "content warning" immediately before you present the work in class. Also include a written content warning, either at the beginning of a piece of written work or in the dev blog of a project, when you submit the work for grading.

This is not intended to limit the subject matter that you address with your work: it is intended to expand it. This simple approach is intended to create an environment in which you are free to address any subject matter that you wish, no matter how challenging, explicit, or controversial, in a spirit of respect and consideration for your classmates and instructor.

Students who ever feel the need to step outside class during the presentation or discussion of work that warrants a content warning may always do so without academic penalty. You will, however, be responsible for any material you miss. If you do leave the room for a significant time, please make arrangements to get notes from another student or see us individually.

The next paragraph contains potentially triggering topics—please feel free to skip ahead.

Content which requires a content warning includes graphic depictions or descriptions of violence, sexual acts, racial, sexual or cultural stereotyping, abuse (especially sexual abuse or torture), self-harming behavior such as suicide, self-inflicted injuries or disordered eating, eating-disordered behavior or body shaming, and depictions, especially lengthy or psychologically realistic ones, of the mental state of someone suffering abuse or engaging in self-harming behavior.

If you have any questions about what requires a content warning, relating to story, game mechanics, and interaction patterns, please let me (the class instructor) know.

If you ever wish to discuss your personal reactions to material presented in class, either with the class or with us afterwards, we welcome such discussion as an appropriate part of our coursework.

Inclusivity and Diversity

In this class, we make a commitment together to foster a welcoming and supportive environment where students of all identities and backgrounds can flourish. This means that

you will be expected to offer content warnings when appropriate, use students' preferred pronouns, and respect self-identifications. While debate and discussion are welcome, please remain aware of the implications of your words and the images that you include in your work. If the instructor or another student points out that something you have said or shared with the group might be offensive, avoid being defensive; this is a valuable opportunity for us to grow and learn together. If you have a concern about any aspect of the class, you are encouraged to speak with the instructor. If you feel uncomfortable speaking with the instructor, you are encouraged to speak with either the undergraduate or graduate advisor for your program.

In making games and interactive media in a professional and ethical way, it is important that you consider diversity. When looking at your projects, you should consider who is depicted and how this work will impact others. What kinds of individuals and communities are represented in your work? What point of view does your work express? This class may assist you in learning how to make work that includes diverse viewpoints, and may discuss racial, religious, gender, and sexual orientation issues in the context of games and interactive media.

Guidelines for Group Critique

Giving and receiving constructive feedback is a key element of critique. Follow these guidelines:

- 1. Pair your critiques with compliments. Before pointing out something that you think could be improved, point out something that you like or something that you think has exciting potential.
- 2. Consider suggesting possible solutions. It can be discouraging to simply hear what somebody thinks is "wrong." Offering ideas for changes or additions that you think might improve your classmates' work can emotionally and intellectually inspire them.
- 3. Speak from the "I." Rather than stating your critique as fact or your suggestions as imperatives, start your sentences with phrases like "I think..." or "I feel..." or "If this were my game, I would..." Many people use the technique popularized by design firm IDEO, and make a statement in the form of "I like... I wish... what if..?"
- 4. Listen carefully and calmly. Avoid the urge to defend your work, unless you feel like that defense adds something important to the conversation. Thank your colleague for their feedback.

If you have a question...

- 1. First, check the class website and the syllabus. Most questions about logistics, assignments, and expectations can be found already listed there.
- 2. If the information you are looking for is not on the syllabus, contact the course Student Assistant.
- 3. If the Student Assistant is unable to answer your question, or your question is of a sensitive nature and you would feel more comfortable speaking with the instructor, you can email the

instructor at the address listed above. You can usually expect a response within twenty-four hours during the standard work week.

4. Schedule an appointment during office hours. Office hours are a wonderful opportunity to speak with an instructor one-on-one. Note the office hours listed at the top of the syllabus and email the instructor at least twenty-four hours in advance to schedule an appointment.

Fair Use

Fair use is a legal principle that defines certain limitations on the exclusive rights of copyright holders. The Interactive Media & Games Division of USC's School of the Cinematic Arts seeks to apply a reasonable working definition of fair use that will enable students and instructors to develop multimedia projects without seeking authorization for non-commercial, educational uses. In keeping with section 107 of the Copyright Act we recognize four factors that should be considered when determining whether a use is fair: (1) the purpose and character of use, (2) the nature of the copyrighted work, (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work. In general, we regard the reproduction of copyrighted works for the purposes of analysis or critique in this class to be covered by the principle of fair use.

Citation Guidelines

Where appropriate, all projects will need to include academically appropriate citations in the form of a Works Cited section, which covers all sources, in order to receive a passing grade. The Works Cited is either included in the project or as a separate document, as appropriate to your project. The style we use is APA 7th edition and you may refer to these guidelines: http://owl.english.purdue.edu/owl/resource/560/01/ (Other styles may be used, by arrangement with the instructor.)

Note for Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to us as early in the semester as possible. DSP is located in STU 301, and is open 8:30am - 5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action.

Learning Experience Evaluations

Learning Experience Evaluations will be conducted in the last class meeting. This will be your opportunity to provide feedback about your learning experience in the class. This feedback helps the instructor determine whether students are having the intended learning experiences for the class. It is important to remember that the learning process is collaborative and requires significant effort from the instructor, individual students, and the class as a whole. Students should provide a thoughtful assessment of their experience, as well as of their own effort, with comments focused on specific aspects of instruction or the course. Comments on personal characteristics of the instructor are not appropriate and will not be considered. For this feedback to be as comprehensive as possible, all students should complete the evaluation.

Syllabus Updates:

This syllabus is liable to change up to the beginning of class and possibly over the semester. Please check the posted syllabus regularly and note all changes that are shared by the instructor in class.

Statement on Academic Conduct and Support Systems

Academic Integrity:

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the <u>USC Student Handbook</u>. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship</u> Misconduct.

In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call
The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline)
provides free and confidential emotional support to people in suicidal crisis or emotional
distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a
national network of over 200 local crisis centers, combining custom local care and resources
with national standards and best practices. The new, shorter phone number makes it easier for
people to remember and access mental health crisis services (though the previous 1 (800)
273-8255 number will continue to function indefinitely) and represents a continued
commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

<u>USC Emergency</u> - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Instructor Biography

Richard Lemarchand

Richard Lemarchand is a game designer, an educator, a writer, a public speaker, an author, and a consultant, and works as an Associate Professor in the USC Games program.

Between 2004 and 2012, Richard was a Lead Game Designer at Naughty Dog in Santa Monica, California. He led the design of all three PlayStation 3 games in the *Uncharted* series including *Uncharted 3: Drake's Deception*, and *Uncharted 2: Among Thieves*, winner of ten AIAS Interactive Achievement Awards, five Game Developers Choice Awards, four BAFTAs and over 200 Game of the Year awards.

Richard also worked on *Uncharted: Drake's Fortune*, *Jak 3* and *Jak X: Combat Racing* for Naughty Dog, and helped to create the successful game series *Gex*, *Pandemonium* and *Soul Reaver* at Crystal Dynamics in the San Francisco Bay Area. He got his game industry start at MicroProse in the UK, where he co-founded the company's console game division. Richard has made storytelling action games the focus of his career, and he is interested in the way that narrative, aesthetics and gameplay work together to hold a player's attention and facilitate the expression of their agency.

A passionate advocate of indie and experimental games, Richard has been involved with the IndieCade International Festival of Independent Games since 2008 and was the co-chair of the IndieCade Conference in 2010, 2012 and 2015. He regularly speaks in public on the subjects of game design, development, production, philosophy and culture. From 2009 to 2019 he curated and MCed the GDC Microtalks, a design track session celebrating games and play with short talks by diverse speakers. He is a former faculty member of the GDC Experimental Gameplay Sessions.

Richard now teaches game design, development, and production in the USC Games program, and is working on a series of experimental game design research projects as part of the USC Game Innovation Lab. His game *The Meadow*, a virtual reality art installation game co-created with Martzi Campos, was selected as a finalist in the 2015 IndieCade International Festival of Independent Games. His latest game, *Phenomenology*, a VR art game, was selected for exhibition at IndieCade 2018. He is the author of *A Playful Production Process, for Game Designers (and Everyone)*, published by the MIT Press in October 2021.

Richard grew up in a small town in rural England, dreaming of ancient civilizations and outer space. Perhaps as a result, he has a degree in Physics and Philosophy from Oxford University.