AI IMPACT REPORT NO. 162 · REVISED 5 OCTOBER 2026 · 250 ROLES COVERED

Games Designers

AI significantly augmenting level design, asset creation, and playtesting.

EXPOSURE	WINDOW	ADOPTION TODAY	READING
58	1–6 yrs	Medium-High	The role is being reshaped.
Elevated exposure	until change lands		Exposure is the share of today's work AI can plausibly take on within the window.

§ 01 WHAT IS HAPPENING

What is happening to games designers

Impact

AI tools are being used to generate initial game concepts, level layouts, character ideas, 2D/3D art assets (placeholder or even initial versions), dialogue, and to automate aspects of game testing and balancing. This accelerates development and allows designers to explore more ideas.

Risk

Major workflow augmentation; focus on core game mechanics, narrative, player experience, and AI tool curation.

The Games Designer role is being transformed by AI, which can automate or assist with many content creation and iterative tasks. This allows designers to focus more on conceptualizing core gameplay loops, crafting compelling narratives, ensuring a balanced and engaging player experience, and skillfully guiding/curating AI-generated content to fit their creative vision.

Sector readiness

Rapidly Evolving & Experimenting

The games industry is actively experimenting with generative AI for art, dialogue, and level design. AI for procedural content generation has been used for a while, but new LLMs and image generators are opening up more possibilities. Ethical considerations around AI-generated assets are also prominent.

§ 02 POSITION

Where you stand

i The Games Designer role is being significantly augmented by AI, which provides powerful new tools for ideation, content creation, and prototyping.

ii AI can accelerate many parts of the game development pipeline, from concept art to dialogue generation and level design assistance, allowing for faster iteration.

iii The core human skills of creativity, vision, understanding player psychology, designing engaging mechanics, and curating AI outputs to fit a cohesive artistic direction will become even more critical. Game designers will act as conductors of AI tools.

§ 03 ACTIONS 15 POINTS

What this means for you

Concrete changes to how the work gets done, in the order you are likely to meet them.

01 **AI for Concept Ideation & Brainstorming.** Use generative AI to explore ideas for game themes, characters, storylines, mechanics, or visual styles based on prompts and keywords.

02 **Procedural Content Generation (PCG) Enhanced by AI.** Leverage AI to create more varied and believable game worlds, levels, or item distributions that adapt to player actions or design parameters.

03 **AI-Assisted Asset Creation (2D/3D Art, Audio).** Employ AI tools to generate initial versions or variations of 2D sprites, 3D models, textures, sound effects, or even music tracks, which are then refined by artists/designers.

04 **Generative AI for Dialogue & Narrative Elements.** Use LLMs to draft character dialogues, quest descriptions, lore entries, or branching narrative options, requiring human editing for tone and consistency.

05 **AI-Powered Playtesting & Balancing.** Utilize AI agents to playtest game levels or systems, identify exploits, gather performance data, and help balance game difficulty or mechanics.

06 **Personalized & Adaptive Game Experiences.** Design systems where AI can tailor game content, difficulty, or narrative paths in real-time based on individual player behavior and preferences.

07 **Rapid Prototyping of Game Mechanics.** Use AI to quickly generate code snippets or simple game systems to prototype and test new gameplay ideas efficiently.

08 **Focus on Core Game Loop & Player Experience Design.** With AI handling some content generation, dedicate more time to designing the fundamental mechanics, player motivations, and overall fun factor.

09 **Curation & Integration of AI-Generated Content.** Developing the skill to guide AI tools effectively and critically select, edit, and integrate their outputs to align with the game's artistic vision and design goals.

10 **Designing AI Characters & NPC Behavior.** Crafting more believable and dynamic non-player character (NPC) behaviors, potentially using AI for their decision-making or conversational abilities.

11 **Understanding the Ethics of AI in Game Development.** Considering issues like copyright of AI-generated assets, impact on artists, and responsible use of AI for player data.

12 **Level Design Assistance.** AI tools can suggest level layouts, enemy placements, or puzzle configurations based on design rules or desired difficulty curves.

13 **Accessibility Design with AI.** AI might assist in identifying or implementing features to make games more accessible to players with disabilities.

14 **Monetization Design (AI-Assisted Insights).** AI can analyze player spending patterns to inform the design of in-game economies or monetization strategies (use ethically).

15 **Continuous Learning of New AI Game Dev Tools.** The landscape of AI tools for game development is evolving extremely rapidly, requiring constant learning and adaptation.

§ 04 CAUSES 10 DRIVERS

What is pushing this change

01 **Advancements in Generative AI (Image, Text, 3D, Audio).** LLMs, image generators, and emerging 3D/audio AI can create a wide range of game assets and content from prompts.

02 **Demand for Larger, More Dynamic & Personalized Game Worlds.** AI can help create vast, procedurally generated worlds and tailor game experiences to individual player choices and styles.

03 **Need to Accelerate Game Development Cycles & Reduce Costs.** AI can automate or assist with time-consuming content creation tasks, potentially shortening development times and reducing asset costs.

04 **Availability of AI Tools & Plugins for Game Engines (Unreal, Unity).** Major game engines are integrating AI capabilities or supporting AI plugins, making these tools more accessible to developers.

05 **Player Expectations for More Intelligent NPCs & Adaptive Gameplay.** Players desire more believable character AI, emergent narratives, and gameplay that responds intelligently to their actions.

06 **Growth of User-Generated Content (UGC) Platforms (AI can assist creators).** AI tools can lower the barrier to entry for creating game mods or new content, fostering larger creative communities.

07 **Data Analytics for Understanding Player Behavior & Improving Design.** AI analyzes player data to provide insights on engagement, difficulty, and preferences, informing design iterations.

08 **Procedural Content Generation (PCG) becoming more sophisticated with AI.** AI techniques are enhancing PCG to create more coherent, interesting, and varied game environments and content.

09 **Desire for Rapid Prototyping & Iteration in Design.** AI can help designers quickly mock up levels, mechanics, or narrative branches for early testing and feedback.

10 **Independent Developer Empowerment through AI Tools.** AI tools can enable smaller teams or solo developers to create more ambitious games by augmenting their content creation capabilities.

§ 05 VARIATION 5 SECTORS

Impact by sector

The headline figure is an average. Where you work changes the picture.

Level Designers	AI for generating initial level layouts, distributing environmental assets, or creating variations. Human focus on overall flow, pacing, puzzles, and unique experiences.
Narrative Designers / Game Writers	AI for drafting dialogues, quest text, lore. Human focus on overarching plot, character arcs, tone, emotional impact, and ensuring narrative coherence.
Character Designers / Concept Artists	AI for generating character concepts, costume variations, or initial 2D/3D model ideas. Human artists refine, add unique style, and ensure alignment with game vision.
Systems Designers (Gameplay, Economy)	AI for balancing game economies, simulating player progression, or testing system interactions. Human focus on designing core mechanics and ensuring fun and fairness.
Technical Designers / Scripters	AI for generating simple scripts or boilerplate code for game events or mechanics. Human focus on complex logic, system integration, and tool development.

§ 06 PREPARATION 8 SKILLS

Skills to build

The skills that keep the human part of this work valuable as the routine part is automated.

01 **Core Game Design Principles (Mechanics, Loops, Pacing, Player Psychology).** Fundamental understanding of what makes a game engaging, fun, and balanced, irrespective of the tools used.

02 **Creativity, Imagination & Conceptualization.** The human ability to envision novel game worlds, characters, stories, and gameplay experiences that are original and compelling.

03 **AI Tool Proficiency & Prompt Engineering (for Design).** Skill in using generative AI tools for art, text, level ideas, etc., and crafting effective prompts to guide their output for design purposes.

04 **Narrative Design & Storytelling.** Ability to create compelling characters, plots, and interactive narratives that resonate with players.

05 **Systems Thinking & Balancing.** Designing and balancing complex interconnected game systems (e.g., economy, combat, progression) to create a cohesive experience.

06 **Player Empathy & User Experience (UX) Design.** Deeply understanding player motivations, needs, and frustrations to design intuitive and enjoyable game interactions.

07 **Technical Aptitude & Understanding of Game Engines.** Familiarity with game engines (like Unreal, Unity), scripting, and the technical possibilities and limitations of game development.

08 **Critical Curation & Editing of AI-Generated Content.** The crucial skill of selecting, refining, and integrating AI-generated assets or ideas to ensure they fit the artistic vision, quality standards, and design goals of the game.

§ 07 INSTRUMENTS 11 ENTRIES

Tools in use

KINDS OF TOOL WORTH KNOWING

01 **Generative AI for Images & Concept Art.** Tools that create images, character concepts, environments, or textures from text prompts or sketches.

02 **Generative AI for Text & Dialogue (LLMs).** Large Language Models used for drafting character dialogue, quest descriptions, item descriptions, or narrative outlines.

03 **AI-Powered Procedural Content Generation (PCG) Tools.** Software or engine features that use AI to create more complex and adaptive game levels, environments, or item distributions.

04 **AI for Game Testing & Balancing.** AI agents that can playtest games to find bugs, exploits, or help balance difficulty and game mechanics.

05 **Game Engines with Integrated AI Features/Plugins.** Major game engines are increasingly incorporating AI tools for animation, NPC behavior, level design assistance, and asset creation.

06 **AI for 3D Model Generation & Texturing (Emerging).** Emerging AI tools that can generate initial 3D models or textures from prompts or 2D images, still often requiring significant artistic refinement.

NAMED TOOLS ALREADY IN USE

Midjourney / Stable Diffusion / DALL-E
Leading AI image generation tools used by designers for creating concept art, mood boards, and visual inspiration for characters and environments.

ChatGPT / Claude / Jasper (for narrative elements)
Large Language Models used for brainstorming narrative ideas, drafting dialogue, generating lore, and assisting with game writing tasks.

Houdini (for advanced PCG, can be AI-enhanced) / Specific AI PCG research tools
While advanced PCG often involves custom scripting, tools like Houdini are used for complex world generation, and AI research explores more adaptive PCG.

Modl.ai / Unity Game Simulation
Platforms that use AI agents to automate aspects of game testing, identify balancing issues, and provide gameplay analytics.

Unreal Engine (with MetaHumans, AI tools) / Unity (with AI/ML toolkits like Sentis)
Major game development engines that are increasingly integrating AI tools for NPC behavior, animation, level design assistance, and content creation.

§ 08 EXAMPLES 5 EXAMPLES

In practice

Ways people in this role are already using AI, and what they get from it.

Brainstorm Character Concepts with Generative AI

EXAMPLE 1

HOW Input a theme or character archetype into an AI image generator to get dozens of visual ideas, then select and refine your favorites with human artistry.

GAIN Massively accelerates the ideation phase, provides diverse inspiration, and helps overcome creative blocks.

Generate Draft Level Layouts or Environmental Details

EXAMPLE 2

HOW Use AI tools or PCG techniques guided by AI to generate initial blockouts for game levels or to populate environments with varied, context-aware details.

GAIN Saves significant time in manual level creation, allows for larger and more varied game worlds, and can adapt content dynamically.

Use AI to Write Initial Dialogue for NPCs

EXAMPLE 3

HOW Provide an LLM with character backstories and a scenario to get draft dialogue options, which you then edit for voice, pacing, and narrative consistency.

GAIN Speeds up the writing process for non-critical dialogue, provides a starting point for writers, and can generate variations quickly.

Rapidly Prototype a New Game Mechanic with AI-Assisted Scripting

EXAMPLE 4

HOW Describe a desired gameplay mechanic to an AI coding assistant to get initial scripts or code snippets, helping you quickly build a testable prototype.

GAIN Allows for faster iteration and testing of core gameplay ideas without extensive initial programming effort.

Employ AI Agents for Initial Playtesting & Balancing Feedback EXAMPLE 5	HOW	Deploy AI agents to play through levels or game systems to identify obvious bugs, exploits, or areas where the difficulty curve needs adjustment.
	GAIN	Provides early feedback on game balance and identifies critical issues before extensive human playtesting resources are committed.

§ 09 CONTEXT

How this role compares

Three neighbouring roles chosen to show the direction of travel.

QA Testers (Executing repetitive, scripted test cases) MORE EXPOSED	AI IMPACT	High (AI can automate the execution of many test scripts, identify common bugs, and perform visual regression testing more efficiently)
	WORK MOVES TO	Shift towards test strategy, exploratory testing, managing AI testing tools, and specialized testing (e.g., performance, security, accessibility).
AI Programmers for Game AI / Machine Learning Engineers for Games DIFFERENT SKILLS, GROWING	AI IMPACT	Foundational (They design and implement the core AI systems for NPC behavior, adaptive gameplay, PCG, and AI development tools)
	WORK MOVES TO	Deep expertise in AI algorithms, machine learning, game engine programming, and specific game AI techniques.
Game Producers / Creative Directors (High-Level Vision & Team Leadership) COMPLEMENTARY, LESS EXPOSED	AI IMPACT	Moderate Augmentation (AI for market research, project tracking insights, concept ideation), but core strategic vision, team leadership, and final creative authority remain human.
	WORK MOVES TO	Overall game vision, team management, budget oversight, strategic decision-making, and ensuring the final product meets quality and market expectations.

§ 10 VERDICT

Closing judgement

> For Games Designers, AI is a revolutionary creative partner and a powerful production tool. It can unlock new levels of iteration speed, content variety, and personalization. The designer's role will evolve to be that of a visionary curator and skilled collaborator with AI, focusing on crafting unique player experiences and ensuring the "soul" of the game shines through any AI-assisted elements.

§ 11 BASIS REVISED 5 OCTOBER 2026

Evidence and revisions

What the exposure figure rests on, what changed when it was last revised, and the published work cited for this role.

SCORE

45 to 58

WINDOW

2-7 years to 1-6 years

The 5 October 2026 review moved the score up by 13 points.

Exposure Index v2. Inputs: task applicability 57/100 (Microsoft AI applicability score 0.29 for Web and digital interface designers; Software developers); observed usage 36/100 (Anthropic observed exposure 0.27); official exposure tier 100/100 (BLS: very high); labour-market trajectory 30/100 (BLS projects employment to grow 8.1% over 2025–35); published adoption rating 55/100 (medium-high adoption). Weighted base 58.4. Final score 58. The previous figure of 45 was raised by 13 points: the earlier method kept 60% of the weight on an undocumented editorial prior and capped movement at fifteen points, so the measured evidence was only partly reflected. The change window moves from 2-7 years to 1-6 years under the one-notch-per-ten-points rule.

HOW THE FIGURE IS BUILT (EXPOSURE INDEX V2)

Task applicability — Microsoft Research, AI applicability score	57 × 35%	20.0
Observed usage — Anthropic Economic Index, observed exposure	36 × 20%	7.2
Official exposure tier — US BLS AI-exposure category	100 × 20%	20.0
Labour-market trajectory — US BLS projected employment change 2025–35	30 × 10%	3.0
Published adoption rating — This report's adoption level	55 × 15%	8.3
Weighted base		58.4
Exposure score		58

MEASURES BEHIND THE SCORE

US Bureau of Labor Statistics · *Employment Projections 2025–35 and AI Exposure Categories* (27 August 2026)

AI-exposure tier: Very high. Projected employment change 2025–35: +8.1%. Matched to Software developers; Web and digital interface designers.

PUBLISHER PDF ARCHIVED COPY

Microsoft Research · *Working with AI: Measuring the Applicability of Generative AI to Occupations* (10 July 2025)

AI applicability score 0.29 (percentile 86 of 785 occupations) for SOC 15-1255, 15-1252.

PUBLISHER PDF ARCHIVED COPY

Anthropic · *Anthropic Economic Index report: Cadences* (26 June 2026)

Observed exposure 0.27 for SOC 15-1255, 15-1252 (percentile 89 of 756 occupations).

PUBLISHER PDF

UK Department for Science, Innovation and Technology · *Assessment of AI capabilities and the impact on the UK labour market* (28 January 2026)

UK context: around 70% of UK workers are in occupations with tasks AI could perform or enhance, above the US average; a one-standard-deviation rise in exposure was associated with a 3.9% fall in UK job postings.

PUBLISHER ARCHIVED COPY

Archived copies are served only where the licence permits; otherwise the link goes to the publisher. Full research library: https://www.careerguard.ai/sources

§ 12 APPENDIX

Method and sources

Each report was written from a large body of published research. The exposure score itself is computed, not written: it is the CareerGuard Exposure Index, a weighted average of occupation-level measures from the US Bureau of Labor Statistics (AI-exposure classification and 2025–35 projections), Microsoft Research (AI applicability scores) and Anthropic (observed exposure), together with the adoption rating published on the report. The organisations and publications below are the standing literature behind the narrative sections. Every source, with dates, licences and archived copies where we are permitted to hold them, is catalogued in the research library.

Exposure Index v2 (October 2026). Each input is scaled to 0–100 and weighted: task applicability 35% (Microsoft AI applicability score ÷ 0.5), observed usage 20% (Anthropic observed exposure ÷ 0.75), official exposure tier 20% (BLS very high = 100, high = 70, moderate = 40, low = 10), labour-market trajectory 10% (50 2.5 × projected % employment change), published adoption rating 15% (very high = 85, high = 70, medium-high = 55, medium = 40, low-medium = 25, low = 10). Inputs not measured for an occupation are dropped and the remaining weights renormalised. An editorial adjustment of at most ±12 points is allowed only for automation channels the measures cannot see (robotics, self-service, machine vision, medical imaging, RPA/OCR, generative video) and is always logged with its reason. Scores are whole numbers, not rounded to five. The change window shifts one notch (a year at each end) per ten points of movement.

I GLOBAL AND MACROECONOMIC IMPACT OF AI ON WORK

World Economic Forum

The Future of Jobs Report series — Employer survey of expected job growth and decline, skill shifts and technology adoption (2020, 2023 and 2025 editions); Artificial Intelligence and the Future of Entry-Level Work (2026).
AI governance and transformation reports — Frameworks on ethical AI, talent strategy and industry transformation.

McKinsey Global Institute

AI, Automation and the Future of Work series — Research quantifying automation potential by task, sector and demographic, from "Jobs Lost, Jobs Gained" to "Agents, robots, and us" (2025).
Industry-specific reports — Financial services, healthcare, manufacturing and others.

PwC

Global AI Jobs Barometer — Annual analysis of job postings and productivity by AI exposure (2024–2026 editions).
Upskilling Hopes and Fears survey — Employee perceptions and readiness.

Microsoft Research and Anthropic

Working with AI (2025); Anthropic Economic Index (2025–2026) — Occupation-level usage data from Copilot and Claude conversations, the two observed-usage measures behind the 2026 revision.

Stanford Digital Economy Lab and Stanford HAI
Canaries in the Coal Mine? (2025–2026); AI Index Report (annual) — Payroll evidence on early-career employment in exposed occupations; annual measurement of AI capability, investment and adoption.

Deloitte
Human Capital Trends series — Workforce, talent and HR technology trends.
Tech Trends series — Emerging technologies and their business implications.

Accenture
Technology Vision series — Forward-looking analysis of emerging technology, with emphasis on AI.
Fjord Trends — Design, innovation and human experience in a digital world.

Boston Consulting Group
AI/ML insights and industry solutions — "The AI Revolution in the Workplace" and related research.

EY
AI and workforce reports — Adoption, talent strategy and ethics.

IBM Institute for Business Value
AI and automation studies — Business models, workforce evolution and leadership.

OECD
AI Policy Observatory — International data and policy on AI, labour markets and skills.
Employment Outlook — Labour-market trends including technological impact (2023–2026 editions).

International Labour Organization
Generative AI and Jobs: A Refined Global Index of Occupational Exposure (2025) — Task-level exposure gradients for every ISCO occupation; successor to the 2023 global index.

International Monetary Fund
Staff Discussion Notes on AI and work (2024, 2026) — Complementarity framing: where AI augments and where it substitutes.

UK Department for Science, Innovation and Technology
Assessment of AI capabilities and the impact on the UK labour market (2026) — UK occupational exposure and job-posting evidence.

Brookings Institution
AI and automation research — Economic and social implications, displacement and skills.

Yale Budget Lab and Goldman Sachs Research
Tracking the Impact of AI on the Labor Market; AI and the US labour market (2026) — Aggregate labour-market monitoring; macro displacement estimates.

Oxford University (Oxford Martin School)
The Future of Employment — Frey & Osborne and subsequent research on susceptibility to automation.

MIT Technology Review
AI & Work — Reporting on AI research and its implications for industries and jobs.

Gartner
Hype Cycle for Artificial Intelligence — Maturity and adoption of AI technologies.
Future of Work reports — Workplace models and talent strategy.

U.S. Bureau of Labor Statistics
Employment Projections 2025–35; AI Exposure Categories; Occupational Outlook Handbook — Ten-year employment projections and, from the 2025 cycle, an AI-exposure tier for every detailed occupation.

Indeed Hiring Lab
AI at Work Report (2025) and posting-market updates — Skill-level transformation estimates and job-posting trends by occupation.

II CORE AI AND MACHINE-LEARNING RESEARCH

OpenAI
Research papers, blog and API documentation — Large language models, generative AI, safety and societal impact.

Google DeepMind
Research papers and blog — Reinforcement learning, AI for science, AGI and ethics.

Meta AI
Research papers and blog — Large language models, computer vision, AI for social good.

Hugging Face
Transformers library and model hub — Open-source state-of-the-art NLP models.

TensorFlow and PyTorch
Documentation and community forums — Core frameworks illustrating practical capability.

arXiv
cs.AI, cs.LG, cs.CV, cs.CL — Pre-print research.

NeurIPS and ICML
Conference proceedings — Top-tier academic research.

ACM and IEEE
Journals and proceedings — ACM Computing Surveys; IEEE Transactions on AI.

Kaggle
Datasets and competition solutions — Applied machine learning on real-world problems.

The Alan Turing Institute
Research and reports — Responsible and applied AI.

III ETHICAL AND RESPONSIBLE AI DEPLOYMENT

NIST
AI Risk Management Framework — Voluntary framework for managing AI risk.

European Commission
AI Act — Risk-tiered legal framework for AI.
Ethics Guidelines for Trustworthy AI — Principles for responsible development.

Partnership on AI
Research and best practice — Responsible AI development.

AI Now Institute
Annual reports — Social implications: power, inequality, rights.

ACM FAccT
Proceedings — Fairness, accountability and transparency.

Data & Society
Publications — Social implications of data-centric technology.

WIPO
Conversation on IP and AI — Intellectual-property implications of AI.

IEEE Global Initiative on Ethics of A/IS
Ethically Aligned Design — Recommendations for ethical AI design.

Center for AI and Digital Policy
Policy briefs — Accountable AI policy.