Lunarch is hiring!

Toronto-based game developer Lunarch Studios is looking to make several new hires for its next title ("Project Sophia"—a multiplayer first-person puzzle game incorporating elements of MMOs, escape rooms, and battle royale games, built in Unreal Engine for PC and consoles).

Accordingly, we're seeking talented game development professionals:
- across many specializations (engineering, production, puzzle design, art, audio, QA, etc.)
- at a range of experience levels (new grads/interns all the way up to director-level)
- from all countries (Lunarch has been operating virtually since 2016 and all positions will continue to be remote for the foreseeable future. All positions are permanently remote. **Relocation will NOT be necessary**.)

About Lunarch Studios

Lunarch is a small (<10 people, but growing significantly in 2021) Canadian game developer founded in 2013 by a group of math olympiad champions, professional poker players, and MIT PhD students. We develop cutting-edge, intelligent games that leverage technology to create novel and deep experiences for smart players. Our products are ambitious, one-of-a-kind titles that define new genres and innovate in multiple directions at once. Their creation demands exceptional intelligence, creativity, and hard work.

We're the developers behind Prismata—a multiplayer strategy game that blends elements of RTS, deckbuilders, and board games. Our upcoming title ("Project Sophia") is similarly innovative and aims to bring large-scale multiplayer gameplay to the 3D puzzle genre (Portal, The Witness, Zelda, etc.).

Lunarch is more like a tech startup than a traditional game studio. We're in a competitive space that rewards quickness and demands high-quality work that meets all requirements on the first try. Ideal candidates are exceptionally intelligent, knowledgeable about games, and highly productive. We love people who have excelled in competitions (math/programming contests, puzzlehunts, science fairs, infosec CTF, competitive gaming, poker, etc.), people with heroic academic accomplishments (awards, publications, etc.), or people with proven track records or killer portfolios (shipped games or jaw-dropping work in art/animation/audio/UI/design/etc.).

The benefits of Lunarch include an excellent work culture and high-tier compensation (aiming to be competitive with tech startups), but most importantly, you'll contribute to ambitious titles that aim to make meaningful advances to the state of the art. We operate in an ideal mid-budget space: we're sufficiently well-funded to hire the best people, do high-quality work, and promote our titles widely, but we're not constrained by the AAA need to stick with low-risk designs for mass-market audiences. **You will make an impact here.**

Contact: careers@lunarchstudios.com

Summary of available positions
Last updated 2021-02-08

Producer
- Full time, permanent, ==hiring immediately==
- As senior as possible (ideally lead/head or chief/director-level)
- Manage ~12 people developing an open-world multiplayer game in Unreal Engine

Software Engineer (Multiplayer/networking focus)
- Full time, permanent, ==hiring immediately==
- Senior level or higher
- Network/server engineering for large-scale (50-100 person) realtime multiplayer (C++, Unreal)

Software Engineer (Other)
- Full time, permanent, ==hiring for several positions throughout 2021==
- Intermediate or senior level
- One of [Unreal Engine generalist, math/algorithms focus, or UI/UX focus]

Puzzle Designer
- All levels
- Part time or contract, ==hiring throughout 2021==

3D Artist or Art Director
- Intermediate or senior level
- Focus on characters, costumes, props, and art direction
- Hiring q2 2021

UI Designer
- Senior level or higher
- Create AAA-quality UI in Unreal Engine (UMG, Slate, blueprint, etc.)
- Hiring q2-q3 2021

Sound Designer
- Senior level or higher
- Responsible for all audio in a 3D multiplayer open-world puzzle game in Unreal Engine
- Hiring q2-q3 2021

QA Lead
- Intermediate or senior level
- Hiring q2-q3 2021

Co-op Student, Intern, or New Grad
- ==Interviewing now for Summer and Fall 2021==
- Game industry experience not required
- You must be brilliant and/or have an amazing project to show us

Producer

- **Lead/Head or Director/Chief level**
- **Full Time, Permanent Position**
- **Remote**

This is possibly our most important hire for 2021! Sophia is a significantly bigger project than our previous titles, demanding a large quantity of asset production, many new hires, several console ports, and constant deadlines for quarterly milestones and weekly testplays. Going forward, our current arrangement of "the game director acts as part-time producer" will no longer be enough! We need a *real pro* to take over, ensuring every deadline is met and the technical and creative output of our team is maximized.

Requirements:
- Minimum 5 years (ideally 10+) in the industry, with several in a related role, e.g. one of:
    - producer or project manager (preferably senior, lead, or higher) at a medium/large studio
    - project head, management, or company founder (at a smaller studio)
- Multiple shipped titles, ideally in the space of high-fidelity 3D PC and console games. More = better, but quality over quantity. Bonus points if you've worked on:
    - games-as-a-service (MMOs, battle royales, etc.)
    - AAA first person titles
    - open world games
    - puzzle games
    - anything in Unreal Engine
- Exceptional organization, collaboration, and communication skills.
- Analytical decision-making skills. Our CEO will be deferring to you for planning decisions that are critical to the success of the business. You need an evidence-based approach.
- Bonus points for experience managing a remote team.

Responsibilities:
- Managing and supporting a team of approximately a dozen full-time engineers and creatives on a development budget in the USD $2M-$3M range.
- Planning for releases and milestones, working with our engineers and game director (on Lunarch's side) as well as our publisher's own producer and product manager.
- Planning and shipping builds for weekly testplays, with the goal of maximizing iteration frequency to gather actionable feedback for our design team.
- Helping to anticipate staffing and outsourcing needs throughout the life of our products, ensuring an optimal match between available people and available work.
- Collaborating with the art team and external contractors to manage asset pipelines and make sure everything ends up in the game.
- Tracking the effort spent on various projects (as needed for Canadian tax credits like SR&ED and OIDMTC).
- Influencing the culture of our company as we continue to grow in a remote environment, ensuring that creative output is optimized in the absence of a physical office.
- Solving the productivity min/max problem: minimizing the burdens that meetings, emails, and productivity software impose on the rest of the team, while ensuring that everyone has clear objectives, gets their work done, stays in the loop, and is able to contribute ideas and feedback to the creative process.
- Managing the QA process (initially on your own, but later with QA staff and/or outsourced QA partners working under you).

This is NOT a role where you'll spend all day sitting in meetings, messing around in Jira, or writing progress reports that nobody reads. We need people who can *get shit done*. Lunarch is a small company, so roles are less specialized than at larger studios. Ideal candidates are able to add value by filling the gaps left by specializations that we're not big enough to hire for.

Possible extra responsibilities (it's not expected that you can do all of these, but the more you can meaningfully help with, the better):
- Outsourcing management. Interviewing outsourcing partners (for art, QA, porting, localization, etc.), negotiating, and acting as a primary contact.
- Hiring (especially recruiting, screening, and onboarding people). We'll be adding 8-10 new staff in the next year, possibly more.
- Grant application writing (e.g. for provincial and federal tax credits).
- Managing our version control processes (Are you a Git wizard? Do you know how to configure LFS on github? Do you have a foolproof system for managing Unreal levels to avoid conflicts?)
- Asset wrangling (Can you work in UE4 to merge in assets from our external partners and put them in the game? Can you configure optimal LOD, collision, or texture compression settings?)
- Build engineering (Can you set up nightly Unreal Engine builds? Continuous integration?)
- Porting (Have you shipped on consoles before? Do you know your way around cert requirements really well? Can you guide our devs through the process? The more we can keep in house, the better.)
- Art direction (Our partner studios have their own art directors, but we still need to review their work and request revisions as needed to ensure assets match our artistic vision.)
- Design (Are you into puzzle design? Progression systems? MMO economies?)
- User Research (Are you into analytics and/or surveys? Are you a stats expert? Good at qualitative research?)
- Are you really talented at naming things?

Salary: USD 75k-120k/yr, possibly higher for top-tier candidates

Contact: careers@lunarchstudios.com

Game Developer or Software Engineer

- **Intermediate, Senior, or Higher**
- **Multiple Full Time, Permanent Positions Available**
- **Remote**

Lunarch is seeking to add new developers to our talented engineering roster for our upcoming title (a multiplayer puzzle game for PC and consoles developed in Unreal Engine).

This is an extremely challenging project (with 100-person multiplayer, MMO-like features, and dozens of 2D and 3D puzzle types). Accordingly, we're looking for highly intelligent and passionate devs who are at the absolute peak of their game and are eager to advance the state of the art by bringing an entirely new genre to life.

We're aiming to hire several devs, with particular emphasis on these specialties:
- Multiplayer netcode (for realtime 100-player multiplayer in UE4)
- UI/UX
- Math/algorithms
- Highly-experienced Unreal Engine generalists

Requirements:
- Minimum 5 years (ideally 10+) in software or game development
- At least one shipped title, ideally in the space of high-fidelity 3D PC and console games. More = better, but quality over quantity. Bonus points if you've worked on:
    - games-as-a-service (MMOs, battle royales, etc.)
    - AAA first person titles
    - open world games
    - puzzle games
    - anything in Unreal Engine
- A background in mathematics, computer science, or a related discipline (usually a degree, though we've hired some legendary people who lack one!)
- Knowledge of C++ or a similar language (bonus points if you're a real wizard with Unreal Blueprints)
- Incredible problem-solving ability.

To have a realistic shot at being hired, you'll need to demonstrate at least one of the following (two or more = we're very interested!):
- Olympiad-level math or programming skills
- Ultra-advanced knowledge (both broad and deep) of Unreal Engine systems and components
- Expertise in multiplayer/network programming (ideally for MMOs or 100-player games)
- Expertise in several other key areas (graphics, AI, procedural generation, UI/UX, FX, tech art, performance-tuning, puzzle design, backend dev, UE4 tooling/extending, console porting, etc.)

You do not need to be an expert in everything, but the more ways you can add value to our team, the better.

Key responsibilities:
- Develop and commit features for a high-fidelity multiplayer puzzle game for PCs and consoles (projects will align with your skills, interests, and background)

- Add new functionality each week for our weekly external playtests
- Execute flawlessly, bringing a high level of polish and craftsmanship to our products
- Contribute to the creative process of building a large open world multiplayer puzzle game
- Fix bugs as needed
- Prototype new gameplay features, puzzle designs, and multiplayer interactions
- Get a lot of work done in a remote environment

Tech we use:
- Unreal Engine
- C++
- Microsoft Visual Studio
- UE4 Blueprints
- Git

Salary: USD 75k-150k/yr

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Puzzle Designer
- **Part-time or contract**
- **Design logic puzzles or interactive puzzle objects/systems**
- **Possibility of full-time work if you're experienced in Unreal Engine development**

We believe that the video game industry (particularly at the AAA level) massively underuses the talents of the world's greatest puzzle designers.

Are you one of them?

Would you like your work to be included in a major multiplayer puzzle game for PC and consoles?

If so, this is your chance. There are two ways you can help:

(1) Logic puzzle contributor
- You'll design grid-based logic puzzles, similar those found in
    - Paper logic puzzles like Nikoli, Grandmaster Puzzles, or Logic Masters
    - Games like The Witness or Picross
- You'll work within a modular system of rules and constraints. You'll be able to mix and match different rules, constraints, and grid symbols to create unique and original works (our logic puzzle system aims to be 10x as expressive as the one in The Witness).
- Puzzles must have a unique solution reachable through a clear logical path, must be original, and must be low to medium difficulty (aim for average solvers taking 30s to 180s per grid).
- You'll submit puzzles using a web-based tool similar to puzz.link or penpa-edit.
- You'll be paid a flat rate per accepted puzzle after our curators have reviewed and test-solved your submissions. Puzzles may be rejected for any reason but we aim to accept most good original submissions (we're not ultra-selective like the NYT crossword).

How to apply:
- Email puzzles@lunarchstudios.com and include a portfolio or links to your original puzzles.
- If you are newer to nikoli-style logic puzzles but specialize in other genres of logic puzzles (e.g. sudoku, chess puzzles, puzzlehunt logic puzzles, math puzzles) then you're still welcome. We're familiar with all of the above and we know talent when we see it.

(2) Unreal Engine puzzle designer
- You'll design interactive puzzles that can be individually placed or procedurally spawned in a giant open world map.
- You'll build them in Unreal Engine (using your choice of Blueprints and/or C++ classes) and place them in a demo map.
- We'll license your puzzle creations, import them, add art/audio if necessary, and adapt them to be included in "Project Sophia".

For more information, including some examples of the types of puzzles we're looking for, see here.

Puzzle requirements:
- Puzzles must be playable in first person.
    - It's recommended that you start with the "First Person" Unreal Engine Template, delete the weapon, and build your puzzle directly in there.

- ○ Your puzzle needs to be able to support both keyboard/mouse and controller input. (We can help with UI implementation if needed, but don't design something that's only pleasant to play with a mouse).
- Puzzles must have an element of replayability, which could be one or more of:
  - ○ They can be manually placed or hidden in the map hundreds of times by a human, and the placement of the puzzle creates a unique challenge every time
  - ○ You (or another puzzle creator) can create 100+ different instances of them
  - ○ They employ random or procedural generation
- Puzzles must be easy to translate to the most common languages
  - ○ They can't depend highly on language, culture, or trivia
  - ○ They shouldn't contain letters, words, or symbols whose semantic meaning is important
  - ○ Numbers are OK to use
  - ○ A small bit of rules text, helper text, or UI text is OK. You can assume it will be translated into left-to-right languages only, but make sure to leave extra room.
- Puzzles *can* depend on colour perception, dexterity, hearing, working memory, musical ability, cognition, or other accessibility barriers that may make them difficult or unenjoyable to some players. But try not to use these elements needlessly.
- Puzzles must not contain anything that our publisher might object to, including:
  - ○ Anything that might be offensive to anyone or any culture
  - ○ Anything that would need a warning for content, fear, photosensitivity, etc.
  - ○ Anything that infringes on existing copyrights, trademarks, or patents (if you use any assets, we must be able to obtain full rights to them)
- Puzzles may (optionally) include co-op multiplayer functionality, if it adds something non-trivial to the experience (beyond just two people working on the same puzzle). It's sufficient that your puzzle works with 2 or more players in the play menu in Unreal Engine; you don't need to optimize for smoothness at high latency or performance with 100 players.

Good puzzles are:
- Easy to understand and self-explaining for a first-time audience member watching a twitch stream
- Highly visual and satisfying to watch
- Enjoyable even after the player fully understands the rules and goals
- Replayable for a long time, with room for player improvement and a high skill ceiling

Your puzzles must be fully functional and bug-free, but they *do not* need to include:
- Final art or audio
- Perfectly optimized high-performance code, blueprints, or materials (we'll fix them up if needed)
- Code to hook your puzzles into the rest of the game (we'll take care of that)

How to apply:
- Send an application to puzzles@lunarchstudios.com, including the following information:
  - ○ A resume/CV or portfolio demonstrating talent in puzzle or game design
  - ○ A 2-sentence description of what you'd like to make for us
  - ○ You do not need to be an expert in Unreal Engine, but you must know enough to complete the project (or be willing to learn on your own time)
- If we're interested in working with you, we'll request a more detailed proposal including a project description, budget, and schedule. Once it's approved, you can get started!
- For small projects, Lunarch will pay for deliverables. For bigger projects from reputable creators, we can provide some payment up front. For even bigger projects, payment can be split across multiple milestones.

Co-op Student, Intern, or New Grad

- **Interviewing now for summer or fall 2021 (possibility of starting sooner if you're available)**
- **Remote**
- **Special consideration to Ontario co-op students or PEYs**

At Lunarch, we love working with fresh talent, and we're keen to hire throughout 2021 for a number of roles for the project (software engineers, 3d artists, QA, etc.)

Ideal candidates are highly intelligent, passionate about games, and capable of getting lots of work done quickly with new and unfamiliar tools. We use Unreal Engine so any experience with it (or similar software like Unity) is a huge bonus. Possible projects could include network programming, AI, graphics, procedural generation, puzzle design, maps/environments, gameplay programming, 3d modeling/animation, UI/UX, player analytics, backend dev, etc..

Key responsibilities:
- Assist with the development of a high-fidelity PC/console video game
- Design puzzles or other gameplay features
- Contribute to the creative process of building a large open world puzzle game
- Document and fix bugs
- Get a lot of work done in a remote environment

Possibly some of the following, depending on your skills and experience:
- Gameplay programming using C++ or Unreal Blueprints
- Implementing AI behaviour or procedural puzzle generation
- Developing maps (terrain sculpting, foliage placement, environment art, lighting, etc.)
- 3D modeling or animation in Blender/Maya/etc.
- UI development using UMG or Slate
- Multiplayer programming in C++
- Development of effects and particle systems using Cascade or Niagara
- Performance optimization using debuggers and profiling tools

Applicants are not expected to be experts in everything, but they must be able to make a meaningful contribution over a short period of time.

Experience in the game industry is not required, but the following are a must:
- A strong technical or artistic background (i.e. you're incredible at math, programming, or art)
- Exceptional problem-solving skills
- Ability to rapidly learn new technologies and work with unfamiliar tools
- Passion for gaming

Tools we use (familiarity with these is not required, but helpful)
- Unreal Engine for game development
- Microsoft Windows and Microsoft Visual Studio for C++ development
- Git for revision control
- Discord for team management and communication

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