Zhi Zheng

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Education

Rensselaer Polytechnic Institute **Aug 2020 – May 2024**

M.S. *in Computer Science &* ***B.S.*** *in Computer Science & Game, Simulation, Arts, and Sciences* *Troy, NY*

Experience

Software Engineer **July 2025 – Present**

2K Games | *C++* *San Francisco Bay, CA*

- Developed for 2K Sports Lab on an unannounced AAA Title
  * Architected a modular, node-based camera framework that transitioned camera authoring from engineers to designers, enabling fully codeless workflows and significantly reducing iteration time
  * Delivered real-time editing tooling (e.g., parameter sliders, bindings), built debugging and visualization systems alongside data-orientated pipelines to support complex, dynamic in-game camera behaviors with reliable, frame consistent execution.
- Currently at Firaxis, working on an another unannounced AAA Title
  * Creating various developer tools for dynamic level design and world systems, including procedural world generation pipelines. These tools empower designers to rapidly prototype and iterate on large-scale environments.

Associate Software Engineer Intern **Nov 2024 – May 2025**

Lightriver Software | *C, C++, JavaScript* *Holmdel, NJ*

- Contributed to netFlex®, an optical domain controller for standardized control of multi-vendor networks, providing real-time inventory, analytics, visualization, and automation.
- Led development and delivered a $3M customer-requested network performance analytics feature. Which transformed a persistent telemetry data into an interactive throughput data table across various devices.
- Designed and implemented RESTful APIs with Swagger, enhanced user authentication encryption, modernized the frontend architecture, and developed an internal CLI database editing tool.

Game Programmer **Sept 2023 – March 2024**

Amplifier Business Camp | *C++* *Troy, NY*

- Founded a small local indie game studio, built and shipped: ***Messozoic***
- Implemented and organized scalable systems, including space efficient save/load serialization, extensible UI, inventory management, dynamic skeletal base-building mechanics, and puzzle state management.

Projects

Geo-Vegetation Spatial Information Model | *JavaScript, Vite, React, Python* **April 2024**

- Established a unique tool for agricultural analysis by working on a geo-vegetation spatial information model. Vegetation (NDVI) and precipitation data are stored in a AWS container, then dynamically loaded on a vercel app that renders our visualization. We developed a legend, check boxes to enable and disable data and a calendar to look at any particular date. Data is scraped from NASA, NOAA, and USGS.
- Link to view the information model: *xinfo.vercel.app*

Custom Game Engine | *C* **Dec 2022**

- Created a multithreaded custom game engine utilizing the windows API and vulkan as the graphics engine.
- The game engine includes a detector that reports memory leaks at where the memory is allocated, an asynchronous file decompression system using LZ4, a CPU profiling system that creates a trace of the CPU thread and outputs it as a chrome trace, and a simple game with bounding boxes.

Skills

Technologies/Frameworks: C++, C#, C, Python, Java, JavaScript, TypeScript, SQL, LaTeX, Git, Microsoft Office (365), Linux, Eclipse, React, Unity, Unreal Engine 5, OpenCV, Visual Studio 2022, Perforce SCM, Plastic SCM, Numpy, Pandas, Tensorflow, PyTorch, Cmake, Nmake, Swagger