# **IEREMY KINGS**

Game Developer, Computer Science Instructor Redmond, WA

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#### WORK EXPERIENCE

## DigiPen Institute of Technology - Instructor and Curriculum Developer, K-12 (05/2013 - 07/2023)

Taught a year-long video game coding and software engineering course for high schoolers. Increased student success rate with required skills and number of students retained significantly over the course of my tenure, tailored class to changing needs of students, wrote many tutorials, and provided technical guidance. Skills and topics included:

- Linear algebra, C++ programming, game engines, and software architecture.
- Version control, software development, and software engineering best practices.
- Team leadership, decision-making, empathy, and how to collaborate with other disciplines.

Additionally developed and taught other online and in-person classes, including continuing education, teacher training, workshops, and homeschool courses. Helped with leading consumer-facing summer class preview events, and led teams of 5 or more teachers to teach online/hybrid classes with more than 70 students.

## **CURRENT PROJECTS**

## Leviathan – Programmer, Game Designer (12/2022 - Present)

2D underwater monster-hunting game, two-person project in Unity.

- Implemented player controls, split-screen local multiplayer, and monster AI (behavior trees).
- Integrated Wwise audio middleware for better control over audio implementation and design.
- Collaborated with artist to define style, aesthetics, and determine art pipeline requirements.
- Defined scope (vertical slice), created product roadmap, and designed gameplay systems.

#### PAST PROJECTS

### Beta Game Development Framework - Programmer (05/2018 - 05/2022)

Internal tool for teaching game programming classes. C++ development library designed to extend/replace pre-existing framework.

- Low-level layer handles application window, vector/matrix math, graphics, and post-processing.
- High-level layer handles object architecture, events, physics, collisions, 2D space, levels, and audio. Used as model for what students implement in assignments.
- Technical writing: Created documentation pipeline using Sphinx and ReadTheDocs. Collaborated with other instructors to create documentation.

## PhaseOut - A.I. Programmer, Physics Programmer, Game Designer, Sound Designer (01/2011 - 05/2011)

Single-player, 2.5D platformer with light puzzle elements. Collaborative project for PC using in-house engine, C++ and Direct X 9.0, 4 programmers.

- Implemented initial game engine architecture, and component-based game objects.
- Designed and implemented features such as physics and collision systems with support for basic platformer physics, tilemap collisions and resolutions, and collision groups.
- Wrote and maintained AI state machine system, used for enemy AI and scripted events.

#### SKILLS

Programming Languages: C/C++, C# Libraries/APIs: FMOD, Wwise, OpenGL Dev Environments/Tools: Visual Studio, Unity Collaboration: SVN, git, GitHub, Zoom, Teams Learning Management: Canvas, Moodle

Visuals/Illustration: Paint.Net, PowerPoint, LaTeX Audio: Reason, Reaper, Audacity, Dorico, Sibelius

Currently Learning: Unreal Engine

#### **EDUCATION**

DigiPen Institute of Technology (09/2010 – 05/2013) M.S., Computer Science

Focus in real-time interactive simulation, A.I.

Illinois Wesleyan University (09/2006 – 05/2010)

**B.S., Computer Science** 

Graduated magna cum laude, music minor