IAN SNYDER

Lead Software Engineer

Portfolio

in <u>LinkedIn</u>

GitHub

iansnyder@gmail.com

Game Dev

Unity: C#

Unreal: C++

Godot: GDScript

Switch, Xbox, Steam, Epic

iOS and Android

Client/Server Networking

Python

Visual Scripting

PlayFab

Perforce & Git

Substance Suite

Leadership

 Agile Project and Team Management

 Enterprise Mentorship & Education

Certifications & Awards

Unity Certified Instructor

 Unity Certified Professional Programmer & Artist

 Winning Entry Dreamhack Austin

Team MVP NCSoft

 1st Place MIGS Battle of the Studios 7 hour game jam

Education

May 2008

B.S. MathematicsMinor in **Art & Design**

Texas State University

– San Marcos, TX

Profile

I've been a game developer for over 15 years, with extensive programming and design experience in Unity. I've shipped 9 games as an indie developer and at large studios, and I've provided advanced technical consultation for AAA studios.

My specialties are Unity project architecture, rapid prototypes, and optimization. I confidently lead cross-disciplinary teams because of my skills in all aspects of game development.

Professional Experience

Sep 2024 - Present

Full-time remote

Lead Software Engineer - HAVIK Solutions

Airfield LZ/DZ Multiplayer Sim | Unity | PC | In Development

- Lead developer of AAA complex networked Airfield LZ/DZ sim
- Key decision-maker for studio-wide Unity project architecture
- Architected and developed critical studio developer environment tools

Mentored devs on best practices, provided Android dev support, and more

Feb 2024 - Sep 2024

Full-time remote

Lead Unity Gameplay Engineer - PLAYA3ULL GAMES

Ordinem Multiplayer TCG | Unity | PC | In Development

- Led a team of developers to create an online MP TCG with direct reports, hiring responsibilities, contracts, project management, etc.
- Responsible for project architecture, Client/Server network programming, backend development, PlayFab Linux server containerization and deployment

Nov 2019 - Present

Contract

Trainer for North America - Unity Technologies

- Led dozens of advanced training workshops for AAA and indie game studios, and AEC clients covering C# programming, physics, memory management, Addressables, optimization, debugging, writing readable maintainable code, and more
 - CLIENTS INCLUDE: Microsoft, Google, EA, Square Enix Montreal, Blackbird Interactive, Kabam, Red Hook Studios, MobilityWare, Gameloft, Accenture, Bell, Fisker
- Taught rapid prototyping techniques using C# and Unity
- Unity Forma product configurator expert

Jan 2018 - Present

Self-employed

Founder & Developer - Studio Nisse

Skycadia Arcade Flight Sim | Unity | Switch, Xbox, PC | 2023

- Developed and published a physics-based flying sim for Nintendo Switch, Xbox Series X|S & One, and Steam
- Programmed with a single code base using Unity and C#
- Created state machine flight AI for physics-driven allies and enemies
- Programmed and debugged online features and saving/loading functionality for all platforms using asynchronous techniques and coroutines
- Optimized physics and rendering to support a wide range of platforms
- Developed code, editor tools, and UI to support creation of customizable pilots, ships, and weapons
- Trained and mentored over a dozen interns in all aspects of game development, including C# programming for complex interconnected game systems

UE5 Vehicle Game Vehicle Combat | UE5 | PC | Prototype

- Developing a physics-based vehicle game using C++ and UE5.
- Experimenting with an integration of the Jolt physics engine in UE5 as an alternative to the Chaos physics system. Jolt can be more performant than Chaos and PhysX, so I'm interested in seeing if there are significant differences between Chaos and Jolt in a real project.
- Utilizes UE5's Enhanced Input system.

Tactics Game Template Turn-based Tactics | Unity | PC | On hold

- Unit Jobs, Abilities, and Clan systems
- Turn-based AI opponents
- Equipment system for Accessories, Armor, and Weapons
- 2D skeletal animated characters in a 3D world with custom rendering sort-order
- Tile-based movement with A* pathfinding
- Complex menu UI with unit management

Dreadmark Racing Fantasy Rally Racer | Unity | PC | On hold

- Vehicle anti-rollbar functionality
- State machine-based open-world driving AI, including Waypoints
- Wheel suspension
- Engine gear shifting system
- Drifting, handling jumps and uneven terrain
- Melee and ranged vehicle combat system
- Item trading system

Brownie: Spirit of the Woods Casual physics game | Objective-C | iOS | 2012

- Kotaku's App of the Day.
- All of the art for the game is photography of hand-stitched embroidered cloth, including the custom font.
- Dynamically created environment for an endless flying experience
- Memory allocation and deallocation
- Implemented Game Center achievements

Aug 2017 – May 2024 Omaha, NE

Lead Faculty of Game Dev - Metropolitan Community College

- Led collaborative VR/AR project for public exhibit at the Kaneko art gallery
- Coded multiple Unreal VR projects with HDR, a multinational architecture firm
- Developed a Unity C# app for the Microsoft HoloLens

2016 – 2017 San Mateo, CA

Senior Game Designer - NCSoft

Criminal Empire - Empire Builder with Turn-based Combat | Unity | AAA Mobile | 2020

I was brought on to course-correct the combat system for a title that had been in development for over 2 years. I was responsible for the technical implementation of all combat systems, working across disciplines to support thousands of character variations, combat abilities, UI and UX, etc.

- Programmed new combat system using state machine representation
- Reduced complex existing code base to simplified and more efficient version
- Technical implementation of abilities, interaction, and UX

2014 – 2016 Las Cruces, NM

Lead Faculty of Game Development - Doña Ana Community College

- Served as Principal Investigator on a successful National Science Foundation grant, where I programmed a
 Virtual Reality application used for pain management in healthcare using C# and Unity
- Spearheaded the Crytek VR First lab, the first community college location in the world
- Collaborated with Virgin Galactic to create VR experiences
- Organized site for the Global Game Jam 2016, with 35 jammers and 10 games produced

2008 – 2014 Montreal, QC

Game Designer and Lead Environment Artist - Gameloft

Winner: Battle of the Studios - FPS Tower Defense | Unity | PC | 2013

- With Mark Desmarais, we won a live 7 hour game jam on the show floor of the Montreal International Game
 Summit against several teams of professional devs from other studios like Square Enix
- Created a first-person tower defense game that recorded and played back the player's input, so the player
 "programmed" the tower's shooting. Mark implemented the recording and playback functionality, while I
 created enemy AI and player interaction.

Gangstar Vegas - Open World | Proprietary Engine | AAA Mobile | 2013

- Designed and executed technical implementation of the game's massive AI features
- Led a team of technical game designers in creating and maintaining the world's navmesh and followed up
 with police AI and difficulty balancing in the open world context, including weapon tweaking, vehicle
 behaviors, and more

Asphalt 7: Heat - Arcade Racing | Proprietary Engine | AAA Mobile | 2012

- Contributed to overall vision for the project, as well as design for menus, career progression, etc.
- Created a C++ & OpenGL prototype for AI best lines using the existing code base
- Technical expert for the design team

Gangstar Rio - Open World | Proprietary Engine | AAA Mobile | 2011

- Led a team of technical game designers in implementation of open-world AI and collision
- Third person combat system design

Asphalt 6: Adrenaline - Arcade Racing | Proprietary Engine | AAA Mobile | 2010

- Technical expert for the design team
- Managed and mentored a team of technical game designers

Dungeon Hunter 2 - Arcade Racing | Proprietary Engine | AAA Mobile | 2010

- Helped design of the tile-based system used for the levels
- Created memorable environments used throughout the game

GT Racing: Motor Academy - Racing Sim | Proprietary Engine | Mobile | 2010

- Managed a team of artists for track creation, and worked closely with programmers for technical constraints
- Designed and created art for most tracks