Yahia Droubi

Tulkarm, Palestine

Phone: +972-595891744 Email: YJD707@gmail.com

Portfolio: <u>Yahia Droubi Portfolio</u> | Gitlab: <u>YahiaDrou Acc</u>

Professional Summary

Innovative and detail-oriented game developer with over 5 years of experience in creating captivating games and advanced software solutions. Expertise spans game mechanics, networking, and immersive user experiences. Proficient in Unity, with a strong command over full-stack development, gameplay programming, and optimization. Adept at problem-solving, collaborating with multidisciplinary teams, and managing complex projects to successful delivery.

Passionate about exploring emerging technologies and delivering cutting-edge solutions.

Technical Skills

- Programming Languages: C#, Java, C++, Python, PHP, JavaScript
- **Game Development**: Unity, Unreal Engine, Photon Quantum, Photon PUN2, DOTS (Data-Oriented Technology Stack), Unity Editor Tools
- Web Development: HTML, CSS, JavaScript, Frontend/Backend Development
- Databases & Networking: MySQL, Firebase, PlayFab, CloudScript, Webhooks
- Game Systems: Multiplayer Mechanics, Procedural Generation, AI Design, IAP Systems, Crossplay Systems, Addressables, WebGL-Sites Bridge
- 3D & 2D Design: Blender, Photoshop, Shader Development, Environment Design
- Development Tools: Git, GitLab, Android Studio, CI/CD Pipelines, Performance Optimization, PlasticSCM, SourceTree
- Advanced Concepts: ECS, Design Patterns, OOP, SOLID Principles, Dependency Injection, FSM, Localization, Analytics & Feedback Integration, Scriptable Objects, Modular Systems, SO Events, Reflection, Inverse Kinematics, Memory Management.

Soft Skills

- Leadership: Demonstrated ability to lead teams and manage projects from concept to delivery.
- **Collaboration**: Strong team player, skilled at working with cross-functional teams to achieve goals.
- Problem-Solving: Adept at identifying challenges and developing innovative, practical solutions.
- **Communication**: Excellent verbal and written communication skills in English & Arabic.
- Adaptability: Quick learner with the ability to adapt to new tools, technologies, and workflows.
- **Attention to Detail**: Ensures high-quality output by focusing on precision and accuracy.
- **Creativity**: Demonstrated ability to generate innovative ideas and solutions, adapt to changing challenges, and think outside the box to achieve results.

Professional Experience

Freelance Developer

2017 - Present

- Delivered complex software solutions for clients and personal projects, focusing on innovation and efficiency.
- Debugged and optimized performance for challenging applications, ensuring robust and scalable solutions.
- Developed and implemented networking systems, multiplayer functionalities, and advanced AI.
- Designed 3D assets, animations, and interactive simulations, contributing to immersive user experiences.
- Conducted programming courses, mentoring students in data structures, algorithms, and software engineering principles.
- Worked in diverse fields, including Android development, Full-Stack development, Reverse engineering, and Game development.

Game Developer

2020 - Present

- Architected and developed innovative gameplay mechanics and systems for cross-platform games.
- Specialized in implementing networked gameplay, fair matchmaking, and user-friendly social features.
- Directed design, animation, and polishing phases to align with creative visions and technical goals.
- Implemented advanced AI systems and bot agents to seamlessly address empty match scenarios, ensuring uninterrupted gameplay and enhanced player engagement.
- Explored emerging technologies, including Web3 integration and NFT marketplaces, enhancing gameplay value.
- Optimized systems for high-performance gameplay across diverse platforms, including WebGL and mobile.
- Developed efficient Unity Editor extensions and DevOps tools to accelerate project development and improve productivity.

2 Education

Bachelor of Science in Applied Computing

Palestine Technical University - Kadoorie, Tulkarm

Graduated: 2020

Full-Stack Developer Course

ISAT Academy, 2017

My Invested Business

- PepUp & Degen Arena Studios: Known for developing Fall Dudes & Degen Arena On Mobile.
- <u>Droubi Technologies</u>: Founder of the studio, known for developing The Green Way
 On Steam.

Only Key Game-Projects

[2D Python Platformer 2017]

Description: A game/engine created from scratch, utilizing 2D physics and math equations to handle platformer game mechanics.

Key Systems: No Engines [Python Code From Scratch for Everything], Co-op LAN, 2D Physics and Math, 2D Animations, Interactions, Simple AI,

[Degen Arena]

Description: An electrifying party game where players compete in fast-paced mini-games and modes, challenging friends or players worldwide.

Key Systems: Networking and Multiplayer, Fair Matchmaking, Combat Mechanics, Social and Community Features, Feedback System, Game Analytics System, PlayFab Database System, Web3 Integration, In-App Purchase System, Skin Customization System, Big Tournaments System, Crossplay WebGL-Mobile-Desktop.

Reference: Degen Arena Website

[Phoenix Rebirth]

Description: An open-world tactical shooter blending third-person exploration with strategic, teambased combat.

Key Systems: Realistic Character Controller, Inverse Kinematics & Procedural Animations, Realistic Environment and Graphics, Real Places Integrated, Car Controller, Destructible Objects, Photon PUN2, Custom AI & Navmesh Agents, MySQL Database, Friends System, Weapons System.

Reference: Phoenix Rebirth TechVid

[Double Jump Remake]

Description: The first crossplay platform-royale race game on mobile and browser.

Key Systems: Multiplayer (Quantum), Anti-Cheat System, Deterministic, Chat, Voice, Social and Party System, Addressables Utilization, Web2 Store System, Web3 Store System, Custom Matches,

MultiRounds, Many Modes, Leaderboard, PowerUps System, Bot AI.

Reference: <u>Double Jump Website</u>

[The Green Way: Farming Simulator]

Description: A 3D farming game where players expand their farm, sell crops, and upgrade their lifestyle by purchasing new items and properties.

Key Systems: 1st/3rd Person Options, Smooth 3D Controller, Complex Saving System, Hints and Tutorial System, Farming System, Land Expansion and Customization, Car Controller, Building System, Horse Controller, Custom Types AI, Procedural Interaction System, Day/Night Cycle, Dynamic Market System, Lifestyle Upgrades, Complex Map-View System, Photo Mode, Custom Settings System.

Reference: The Green Way - Steam

[Double Jump NFT]

Description: A fast and frenetic race-to-finish platform-royale game with competitive multiplayer. **Key Systems**: Multiplayer (PUN2), Recorded Path AI Follower, NFT Tokens Integration, In-App Marketplace, Chat & Party Systems, Multiple Game Modes, Leaderboard, WebGL Browser, Custom Types AI, Ranking System, Multiple Maps, Results & Standings System.

Reference: <u>Double Jump NFT Website</u>

[Goal Busters]

Description: A fast-paced, multiplayer action-sports game combining intense competition with brawling mechanics.

Key Systems: Photon Quantum 3, In-App Marketplace, Photon Chat, Photon Voice, Social and Party System, Multiple Ball Game Modes, Leaderboard, All Platforms Crossplay, Custom Types AI, Ranking System, Standings System, PlayFab, IAP Real Money, Abilities System.

[Lab-Engine]

Description: An interactive simulation platform for safe and realistic virtual scientific experiments. **Key Systems**: Interactive Simulations, Realistic Scenarios, Sandbox, Student-Centric Design, Always Updated Labs, Audio and Text Supervisor, Unexpected Scenarios Handler, Ads Integration.

Reference: <u>Lab-Engine Simulation Demo</u>

[Mindventures]

Description: A 2D educational game turns learning into an exciting puzzle for students.

Key Systems: Mini-Games Galore, Leaderboards, Puzzles Solving System, Auto-Playing Tutorials, 2D

Procedural Generation, Difficulty Options System.

Reference: Mindventures Game Demo

[Knowledge Run]

Description: A vibrant 2D platformer blending fast-paced action with educational challenges. **Key Systems**: 2D Character Controller, Realtime Integrated Quizzes, Fast-Paced Platforming, Database, Leaderboards, Saving System, Engaging Storyline System, 2D Interactions, 2D AI, Dynamic Rewards, Rich 2D World, Mobile Platforms, Ads Integration.

Reference: Knowledge Run Demo

2 Other Not-Games Projects by Me:

- [Personal Portfolio Website] A responsive portfolio showcasing my work, built with HTML, CSS, JavaScript, Bootstrap, and Matter.js.
- [Android Firebase Store App] A marketplace app for selling second-hand items with chat functionality using Firebase (Auth, Firestore, Storage, Realtime Database).
- [Android MySQL Dentist App] A dentist appointment booking and communication system with admin features, built with MySQL, PHP, and Android (Java).
- [Android Questions-Puzzle App] A word puzzle game with interactive levels and scoring mechanics.
- [Android Chat Application] A real-time chat and messaging app with user authentication and media sharing using Firebase.
- [Store Management System] An Android app for managing store inventory, sales tracking, and customer records with MySQL/PHP backend And C# [Desktop].
- [E-Learning App] An educational app providing interactive lessons and quizzes, built with Firebase (for content & users) and PHP/MySQL for admin panel.
- [Restaurant Ordering System] A web and mobile app for ordering food, managing menus, and tracking orders using Android (Java/Kotlin), PHP/MySQL, and a web-based dashboard.
- **[3D Virtual University Tour] -** 3D Virtual University Tour (Desktop App) A 3D interactive tour of university buildings with self-made models and detailed building information.

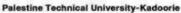
Key Achievements

- Spearheaded the development of innovative systems, including multiplayer crossplay and Web3 integrations.
- Optimized game performance, reducing load times and enhancing user experience across multiple platforms.
- Delivered large-scale gaming projects with advanced features, including NFTs, real-time analytics, and procedural content generation.
- Designed and implemented AI-driven systems & mechanics, improving player engagement and immersion.
- Streamlined development workflows by creating custom Unity Editor tools and DevOps pipelines, reducing project timelines by up to 30%.
- Mentored aspiring developers and junior team members, fostering expertise in game development principles and best practices.
- Conducted detailed market and player behavior analysis to guide design decisions and ensure product-market fit.

2 Academic Recommendations -2020

جامعة فلسطين التقنية - خضوري











01-12-2020

To whom it may concern,

I am pleased to comment on my student Yahia Jihad Kamal Droubi. Being the head of the department and one of Yahia's teachers I can say he has been a talented student with great programming skills. And that's something approved by all his teachers.

I have known Yahia as a very ambitious, motivated, talented and a real fast learner. He developed skills in computer graphics in a very short time under my guidance. This shows his commitment and hard work abilities. I would like to mention here, that he is personable and easy to work with. Not only that, but also has a popular personality to lead teams with constructive collaboration with his colleagues.

As his graduation project's supervisor, **Yahia** showed an excellent presentation about his own 3D realistic game which he created with expertness. He completed all his tasks promptly, effectively and efficiently.

I recommend Yahia very strongly, I have no doubt he will perform very well. I wish him all the best for his future career.

Should you have any further questions about him, feel free to reach me at my email.

Sincerely,

Dr. Hasan Alhajhamad Applied Computing Department Faculty of Applied Sciences Palestine Technical University-Khadoorie

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Email: h.hamad@ptuk.edu.ps

جامعة فلسطين التقنية







Date: 28/11/2020

To whom it May Concern

It is with my pleasure to write a letter of recommendation for Mr.Yahia Jihad Kamal Droubi. I have known Yahia at the Department of computer science/ PTUK University as a graduate student in the department of computer for more than two years.

I have taught Yahia two courses in the BSc. Program at the department, he was a good student. He has a very good background in the field of computer science. Yahia is an opened mind and hard working person. He is personally pleasant and has good skills for building friendship with his colleagues. Yahia is very ambitious, motivated, and has a strong ability to continue his graduate. Moreover he has good skills for creative work in the area of computer science and research ability.

I knew Yahia in the senior project and other projects. Yahia was an excellent manager. He developed very good technical writing and presentation skills. He is well organized and precise in timing

I recommend him very strongly to be accepted in your company. I have no doubt that he will perform very well.

Your Sincerely

Mr. Hadi Khalilia

Department of Computer Science