### **SOUMYA THAKUR**

E-1902, Assotech Windsor Court, Sector 78, Noida - 201301

Email: <a href="mailto:thakur.soumya20@gmail.com">thakur.soumya20@gmail.com</a>; Phone: +91-7011397026; Github: <a href="https://github.com/soummy21">https://github.com/soummy21</a>; LinkedIn: <a href="https://www.linkedin.com/in/soumthakur/">https://www.linkedin.com/in/soumthakur/</a>

#### **OBJECTIVE**

Lead Game Developer with over 3 years of experience developing gameplay mechanics and delivering quality gaming experiences for mobile and web platforms. Aiming to pursue a Master's in Interactive Entertainment Technology to advance skills in building complex game systems and transition into a career in large-scale game development.

#### **EDUCATION**

Bachelor of Technology (Mechatronics), Manipal Institute of Technology, Manipal

**July 2017 – September 2021** 

CGPA: 7.55

Minor in Robotics and Automation

Key coursework: Machine Learning, Machine Vision, Artificial Intelligence and Mechanics of Robotic Systems

#### WORK EXPERIENCE

# Founding Team Member, Tomo Club, Delhi

July 2022 - Present

- Designed the 'Gameplay and Experience Module' as a solution for delivering games to classrooms, featuring moderation tools for teachers to observe student gameplay. Implemented the product from ideation and feature design to programming and A/B testing.
- Developed multiplayer gameplay systems for four titles using Unity, C#, and Photon Engine, including AI-driven enemies, 2D/3D co-op puzzles, and PvP grid-based mechanics, working on the entire development cycle from prototyping to maintenance.
- Spearheaded a team of developers in the technical execution of over ten in-house multiplayer educational game projects and a collaborative project with MGIEP (UNICEF). Ensure modular game architecture and a robust codebase, enhancing the scalability and maintainability of the company's game portfolio.
- Optimized game performance on the web, especially for Chromebooks, by reducing CPU and memory overheads, lowering network latency, and optimizing resource usage, resulting in a 20% increase in overall frame rate.

## Game Developer, Freelance

June 2021 - May 2022

- Played a key role as a game developer in developing two mobile titles, Gorilla Chase and Towers of Hell: Challenge, and multiple hyper-casual and casual prototypes for various clients.
- Built scalable game architecture using state machines to control game flow, the strategy pattern for robust character abilities and weapons, and the observer pattern to decouple systems globally, facilitating easier integration of new features and reducing time to market by 30% for subsequent updates.
- Integrated SDKs into the games, including GameAnalytics for progression tracking, Unity IAP for purchases, Firebase for A/B testing and crash analytics, One Signal for notifications, and AppLovin Max for ads

# **INTERNSHIPS**

## Game Development Intern, Gamoksh, Mumbai

October 2020 – February 2021

- Developed gameplay elements, animations, user interfaces, physics interactions, audio integration, shaders, and particle effects for 6+ hyper-casual prototypes on the Android platform.
- Implemented gameplay mechanics, including AI behaviour for bots, jelly physics interactions, and animated ragdolls, contributing to overall game dynamics.
- Collaborated on an internal tool for rapid level generation that reduced level creation time by 40%, enabling the generation of over 100 unique levels.

### TECHNICAL SKILLS

**Programming Languages:** C# (4 yrs), C++(1 yr), Python(2 yrs)

Game Development: Unity Engine(4 yrs), Photon Engine (2 yrs), Game Design (3 yrs)

Software Engineering: Object-Oriented Design(3 yrs), Design Patterns (2 yrs), SDLC (3 yrs), Git (3 yrs), GitHub

Actions (1 yr)

**SDKs:** Google Firebase(1 yr), Game Analytics (3 yrs), Unity Gaming Services (1 yr)

# **ACADEMIC PROJECTS**

Title: Adaptive Path-Planning for Agricultural Robots [Manipal Institute of Technology] Feb 2021 – July 2021

Role: Team Member

**Description**:

- Designed and developed an adaptive path-planning algorithm for a tracked robot, enabling it to navigate agricultural fields with varying terrain and dynamic obstacles.
- Leveraged LiDAR sensors and computer vision techniques (OpenCV) to enhance the robot's obstacle detection and terrain mapping, achieving significant performance improvements.
- Applied the algorithm's adaptive parameters to optimize the robot's movement in rain-affected fields, contributing to agricultural applications like automated field monitoring and resource management.

### CERTIFICATIONS/WORKSHOPS/ADDITIONAL COURSES:

- Complete C# Unity Developer 2D: Learn to Code Making Games (Udemy) May 2020
- Introduction To Game Development, Michigan State University (Coursera) April 2020

## ACHIEVEMENTS/CO-CURRICULAR/EXTRACURRICULAR

- Video Editor, Nagaab Filmmaking, Manipal Institute of Technology January 2019 to November 2020
- First Position in Jeopardy, Revels 2019
- College Club Football Team January 2018 to May 2019

## LANGUAGES KNOWN

English(proficient), Hindi(fluent), Bengali(native), Spanish(basic)