Manny Mallea

Game Developer/Software Engineer

💼 mannymallea.com 📞 (781)-467-9922 @ e.mallea@outlook.com

Summary

My career focus is on game development, with main interests in game systems, AI, and optimization. Through numerous published/delivered works, I have worked with various OOP languages (C#, Python, C++), using game engines such as Unity, and working with small-mid sized teams in multi-year Agile cycles. I am in constant pursuit of enhancing my skillset, such as with learning Unreal or experimenting with cutting-edge technology.

Professional Experience

Founder | Sunset Dreamland LLC (2021-Present)

- Founded Sunset Dreamland LLC as a solo venture into indie game development.
- Published Sole Iron Tail (2021), a Unity-based project I programmed, designed, and organized on my own time. Also collaborated with contractors for art and music.
- Products/prototypes made under this LLC have been used to explore game mechanics (e.g. 2D physics, complex state-machines), software (e.g. Unreal), and ever growing Unity features (e.g. Cinemachine, Sprite Shape).

Assistant Staff, Software Engineer | MIT Lincoln Laboratory (2019-Present)

- Full-stack development in Serious Game projects, utilizing Unity and Phaser.js as game engines, while incorporating networking capabilities with UNet/Mirror/FishNet, REST API's, and microservices.
- Developed and delivered an AI agent-based simulator tool in Python. Designed agent behavior patterns, including scheduling based on agent needs and inter-agent communication when conducting events.
- Led various developer teams on an exploration of Mixed Reality development, leading to the creation of a network multiplayer, arena-scale, co-located experience for the Microsoft Hololens.

Programmer, Producer Internship | MassDiGI, Worcester MA (2016-2018)

- Coordinated multi-disciplined teams in the development and publishing various games, such as Fusion Galaxy (2015) and Little Grimm (2018), tracking tasking via Kanban boards and pushing work via Perforce/PlasticSCM.
- Documented architecture, project coding standards, and milestones to support internal developer rotation.
- Profiled, optimized, and built games to meet low-end device memory and cpu limitations for iOS and Android.

Skills and Achievements

Programming: C#, Javascript, Python, C++

Engines: Unity (v5-v2022), Unreal (v4- v5), Phaser.js (v3)

Production: Agile, Kanban, Issue Tracking via JIRA/Confluence

Version Control: Git, PlasticSCM, GitHub, Perforce

Achievements:

- AHFE Best Paper Award regarding Serious Game work. (2022)
- MassDiGI Game Challenge – Indie Runner-Up for Sole Iron Tail (2019)
- App Store feature for Little Grimm (2018)
- Unity GDC Student Scholarship (2018)

Education

Becker College, Worcester MA
Bachelor's Degree in Interactive Media Design, Programming Concentration
GPA 3.876 | Graduated May 2018

Publications

Alekseyev, J., Chmielinski, M., Mallea, E., Kurucar, J., Mancuso, V., Seater, R. (2022). Fun as a Strategic Advantage: Applying Lessons in Engagement from Commercial Games to Military Logistics Training. In: Salman Nazir (eds) Training, Education, and Learning Sciences. AHFE (2022) International Conference. AHFE Open Access, vol 59. AHFE International, USA. http://doi.org/10.54941/ahfe1002399