Portfolio: <a href="https://nobledust.com">https://nobledust.com</a>

# **Professional Experience**

# **Gameplay Engineer – Epic Games (May 2021– present)**

Fortnite: Season 18

- Gameplay programmer on the "War Effort" community fundraising feature, using existing aggregation tech to allow players to vote between 2 items and automatically add the winner to chest loot pools.
- Gameplay support for bringing back the "B.R.U.T.E. Mech," a vehicle created for season 10 that would be funded as part of the War Effort. The mech is a unique vehicle, the only one in Fortnite that is technically a player pawn, which created additional complexity.

# Fortnite: Season 20Currently in production

# Gameplay Engineer – Insomniac Games (August 2018 – May 2021)

## Marvel's Spider-Man: Miles Morales

- Gameplay programmer on "The Battle For Harlem" mission, including the final boss fight with The Tinkerer and the post-fight specialized gameplay sequence. Worked closely with design and VFX to achieve our narrative, gameplay, visual, and performance targets for the level. [Video]
- Gameplay programmer for The Tinkerer chase sequence at the end of the "Curtain Call" mission.
- With support from VFX and accessibility teams, implemented several of the new accessibility options including button swapping, low-visibility modes, and chase assist options.
- Implemented many other fixes and one-off features, including the visor mods "Eyes in the Back of My Head," "Optic Triangulation," "Residual Venom," and "Eyes on Target."

### Marvel's Spider-Man: The City that Never Sleeps

- Gameplay programmer responsible for Silver Sable, supporting the lead combat designer on the enemy Silver Sable fight and the encounter designer for the allied Silver Sable AI a few missions later.
- Post-launch bugfixes and patch support for the main game & the City that Never Sleeps DLC.

# Game Engineer - Schell Games (August 2016 – August 2018)

# Star Wars: Jedi Challenges – Duel

- Lead combat programmer working closely with the design and art teams to bring unique melee combat systems to a mobile AR platform [Video].
- Prototyped and implemented all core 1-on-1 AR lightsaber combat systems for blocking, attacking, and fight-specific attacks (such as blaster deflection) for 6 duels over the course of 8 months.
- Created a variety of Unity extensions for the team, including tools to allow designers to quickly turn
  animations into in-game attacks, workflow simplifiers like a favorites window and a rig optimization
  window, and scripts to automate common tasks like creating materials for use on low-end devices.

# Project "Red"

• Prototyped video-game-themed track-based AR theme park ride by creating an "AR in VR" experience using the Unity and HTC Vive.

# Project "Monster"

- Modified codebase of an iPad drawing game to create designer-facing tooling & an audio pipeline that allowed the team to increase the game content by 3x over the 10 weeks of the project.
- Created new systems to support data persisting across multiple play sessions, player choice and branching narratives, and art effects not present in the initial release of the game.

## Game Developer - Playful People (February - August 2016)

• Created gameplay systems for an unreleased mobile rhythm game, including transaction-based and reversible scoring, arbitrary runtime time scaling, and prototypes of core user interactions.

#### **Game Developer – Off By One Studios (August 2014 – July 2015)**

• Created a large number of prototypes for small Unity games, including many 2D adventure and puzzle games and real-time-strategy game systems.

## **SDE Intern – Amazon.com (June – September 2013)**

• Built and maintained web applications for third-party sellers using Javascript frameworks.

#### **Education**

#### Bachelor of Science, Computer Science – Western Washington University, Bellingham, WA – 2014

• Notable projects include a UNIX shell implementation in C and a speed-reading application for Android.