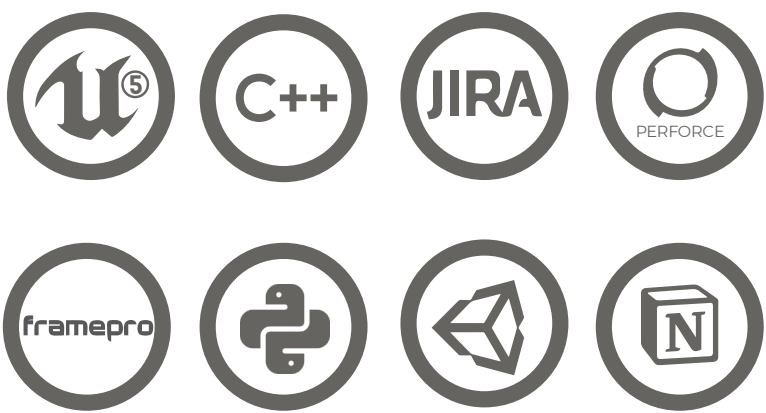


# — GAMEPLAY — PROGRAMMER



## /SOFTWARE

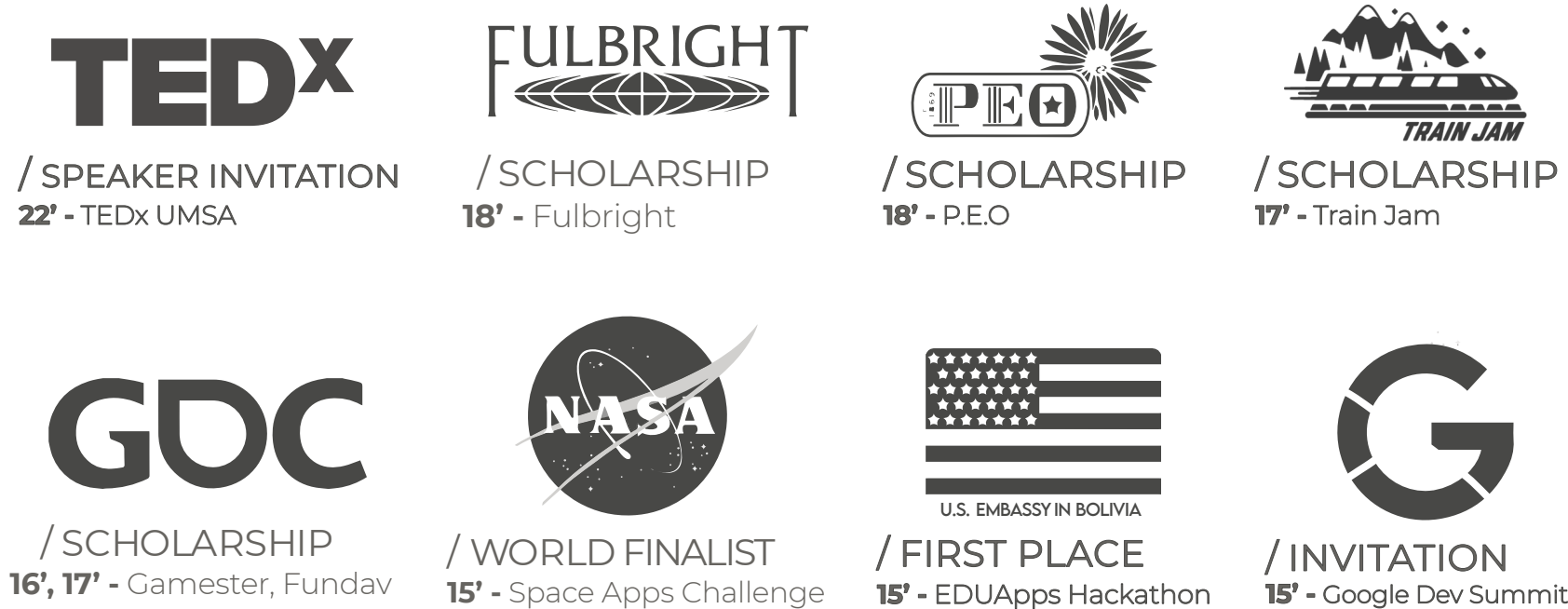


**Action Driver.**  
Relentless **Scholar.**  
**Deep Diver.**  
Workflow **Min-Maxer.**  
Creative **Problem Solver.**  
Interested in **games** as a powerful art form, being able to **communicate ideas** better than any other medium through **game mechanics.**

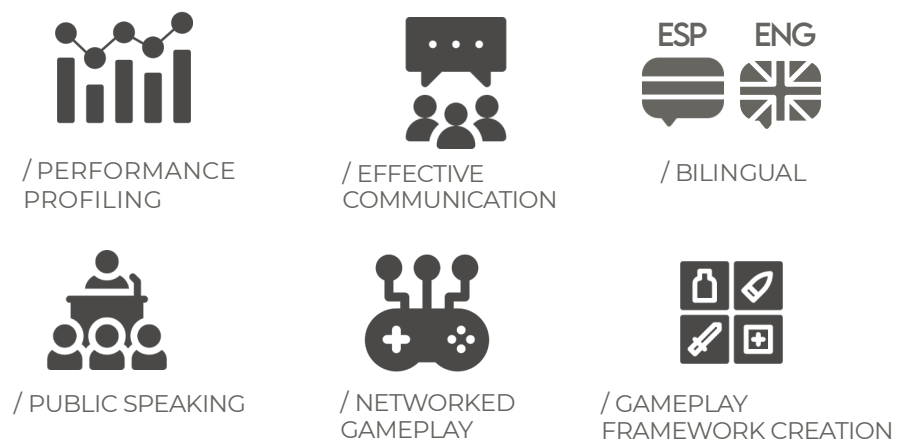
## /EXPERIENCE

- JAN '22 - PRESENT**  
**EPIC GAMES**  
/SENIOR GAMEPLAY PROGRAMMER (FORTNITE)
- FEB '15 - JUL '15**  
**NICOBIS**  
/GAME DESIGN INTERNSHIP (NIÑAS VS PRINCESAS)
- AUG '19 - JAN '22**  
**EPIC GAMES**  
/GAMEPLAY PROGRAMMER (FORTNITE)
- JAN '19 - AUG '19**  
**TRUST THE PROCESS**  
/PROJECT LEAD  
/GAMEPLAY PROGRAMMER (IN HARMONY)

## /AWARDS



## /SKILLS



## /EDUCATION



# /PROJECTS



## FORTNITE BATTLE ROYALE - EPIC GAMES

NOV '21 - PRESENT - SENIOR GAMEPLAY PROGRAMMER  
UE5 - C++, BLUEPRINTS



## FORTNITE IMPOSTORS - EPIC GAMES

JAN '21 - NOV '21 - GAMEPLAY PROGRAMMER  
UE5 - C++, BLUEPRINTS



## FORTNITE - EPIC GAMES

AUG '19 - PRESENT - PROGRAMMER  
UE4 - C++, Blueprints



## IN HARMONY - TRUST THE PROCESS STUDIO

JAN '19 - PROJECT LEAD, GAMEPLAY PROGRAMMER  
UE4 - C++, BLUEPRINTS



## CURSE OF CALYPSO - PERSONAL PROJECT

JAN '19 - APR '19 - GAMEPLAY PROGRAMMER  
UE4 - C++, BLUEPRINTS



## WICKED WIZARDS - PERSONAL PROJECT

JAN '18 - PROGRAMMER  
UE4 - BLUEPRINTS



## MI TIERRA - FREELANCE PROJECT (VIVA)

AUG '15 - SEP '15 - PROJECT LEAD, PROGRAMMER  
UNITY3D - C#

- Implemented the **remote-controlled Falcon Scout** item:
  - Created a **decoupled** set of **abilities** that was easily **extendable** by design, for enemy marking, door bashing, and loot pickup. Created a smooth **boost ability** that exposed a **custom lerp curve** for Design to tweak
  - Simulated the **"Simulated Proxy" networking** status, effectively **bypassing engine mechanics** not compatible with Fortnite (Possession/De-possession).
- Implemented **tooling** for **Vines** (a re-skin of Grind Rails) to **slice** them out in pieces via **Editor** for **performance optimization** (HLODs / Level Streaming)
- Collaborated** with the Optimization team to **measure and improve** the **performance** (**hitches, network waste**) of **gameplay** to **unblock multi-platform support**

- Implemented condition-based **networked Ghost system** (alive players can't see or hear ghosts) via UE4's **replication graph**.
- Implemented Impostor Sabotages based on Gameplay Abilities, created a **Sabotage Framework** that allowed designers and engineers to **easily make sabotages** while **hiding** the **complexity** of different sources of **interruption** (Summoned Meetings, Disconnections).
- Implemented Voting** State's different stages, from **spacial targeting** to a **vote resolution system** based on the design specification
- Iterated** on the **design** of the initial version of **Quick Chat** to **enhance** the **UX** and provide more **organic input methods** (Like a physical map for location selection, a grid for player selection and a radial for message selection)
- Worked on v2 of Lyra's **Event Message Router** for internal use. Adopted a **component-based** architecture and added **listener "bubbling"** and **scoping** functionality

- Led** a team of external **contractors** and **drove** the **development** of **Item Shop 2.0** (A complete Item Shop Revamp), successfully **enabling** the **team** to **implement** a **modular** and **maintainable solution** and completely **eliminating** the **tech debt** introduced by the legacy version of the shop.
- Entirely **refactored** the old version of the **Emote Wheel**, by creating **encapsulated building blocks** that **enabled** isolated **features** to be **used without** being **coupled** with each other, letting other teams to **flexibly reuse** aspects of the Emote Wheel in **other contexts**
- Created** a **generic Radial Menu System** inside UE4 that allowed other developers to create radial item setups, also created a higher level "Slotted Radial" based on "Slots" that could be filled with any type of element (menu options, items, etc)
- Collaborated** with **Design** team to build the **HUD** of the **NPC conversation system**.

- Implemented **highly extensible and tweakable gameplay systems** on UE4 C++ that can be extended and overridden in Blueprints.
- Designed and implemented multi-state **AI** for the final **boss** of the game using **Behavior Trees**.
- Organized meetings to **convert** ambiguous playtesting **feedback** into concrete programming **tasks, boosting** the **production** and iteration of **player-oriented features**.
- Mentored** and aligned the **programming** team to a clean and **maintainable architecture** via weekly **"Rubber Ducking" meetings**.
- Promoted** the usage of a **Continuous Integration** system, which drastically **reduced** the number of **bugs** and encouraged **early bug detection**.

- Designed and Implemented the **AI** for two types of guards, using a combination of abstracted **stimuli** detection and **Behavior Trees** to achieve highly reactive enemies.
- Encapsulated AI** behaviors in order to easily create custom **modular enemies**.
- Implemented a **grappling hook mechanic** with a formula-based **optimized targeting system**.
- Retargeted** and shared **animations** between the Enemy Skeletal Mesh and the Player's using a **transfer humanoid Rig**.

- Conceptualized and implemented Game **Mechanics** that **encouraged meaningful multiplayer interactions** between the two main characters.
- Design a level that **reinforced PvP** encounters via shortcuts to a main hub area.
- Created a **Visual Game Design Document** that outlined the core idea of the game.
- Conceptualized, **implemented** and **balanced** a **combat system revolving** around a **main resource** (keys).
- Implemented the Player **Animation State Machine** that featured **layered animations** on user-defined slots.

- Implemented** a custom **third person controller** specially suited for **virtual joysticks**.
- Implemented** a real-time **character switching** mechanic to afford tactical switching between two main characters.
- Coordinated** with the team and **ran a brainstorming** session to conceptualize game **mechanics based** on the **traditions** of the Bolivian culture.
- Collaborated** with the **artists** to maintain a **polygon** and **texture size budget**, which successfully enabled the team to **deliver** the game on **mobile** within **48h**.
- Adapted the bonus level of the game to interface with **Google Cardboard**.