Jose Lima

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EDUCATION

Carnegie Mellon University, *Pittsburgh PA*   **May 2027**

Bachelor of Science in Information Systems | Minor in Computer Science and Game Design

Relevant Coursework: Computer Graphics, Principles of Imperative Computation, Mobile Design and Development, Application Design and Development, Database Design and Development

EXPERIENCE

XR Research Assistant @ CMU Augmented Perception Lab   **May 2025 - Present**
CMU Human Computer Interaction Institute | In-Person   *Pittsburgh, PA*
- Developed a motion capture data-collection pipeline in Unity, enabling recording and replay of Meta Quest VR hand movements and OptiTrack motion capture suit data, by programming core systems in C#.
- Implemented a three-point calibration system, improving alignment accuracy between OptiTrack skeletons and Meta Quest VR hands, by designing a transformation algorithm to sync coordinate systems.
- Extended summer research into a fitness app prototype, presented to ASICS researchers for feedback, by integrating new features such as exercise selection and replay within the record/replay system.

3D Graphics Engineer   **August 2025 - Present**
Computer Graphics | Coursework
- Implemented fundamental rasterization features in C++, rendering lines and triangles with depth buffering, blending, interpolation, mipmapping, and supersampling, by programming core modules of a rasterizer.
- Developed mesh editing operations, enabling geometry manipulation such as edge flip and split, and triangulation, by extending half-edge mesh data structures in C++

Full Stack Software Developer   **February - May 2025**
Application Design & Development | Coursework
- Built database models, controllers, and views in Ruby on Rails, passing 100% of unit and integration tests , by following MVC architecture and implementing test-driven development with SimpleCov and Cucumber
- Developed role-based access controls and API endpoints, supporting JSON responses for external integrations, by implementing authorization rules and constructing API controllers

LEADERSHIP EXPERIENCE & ACTIVITIES

Society of Hispanic Professional Engineers (SHPE)   **April 2024 - Present**
Treasurer   *Pittsburgh, PA*
- Secured a Purchasing Card, joining a select group of 10 CMU clubs out of 300+ organizations with this financial privilege, improving transparency and efficiency in our chapter spending.
- Expanded chapter events by 50% as measured by increased professional, academic, and community programs for members, by securing funding and managing resources effectively

Game Creation Society (GCS)   **August 2023 - Present**
Member   *Pittsburgh, PA*
- Developed semester-long games, with teams of 10+ members, by contributing programming via the Unreal Engine and art assets via the Unity Engine
- Implemented core gameplay systems and art integration, leveraging agile workflows, git, and cross-disciplinary collaboration to produce playable demos at the end of each semester

SKILLS

Languages: C#, C++, C, React, Java, Python, JavaScript, SQL
Applications: Unreal Engine, Unity, OptiTrack, Perforce, GitHub