David Shahi

shahidavid02@gmail.com • (818) 629-5495 • Portfolio Website

Objective

Dynamic and ambitious Computer Science graduate with a passion for immersive technologies and innovative software development. Eager to leverage skills in full-stack development, virtual reality (VR) programming, and mobile app development to contribute to cutting-edge projects. Seeking a challenging role where I can apply my expertise in Java, C++, Python, Unity, and Android Development to drive impactful solutions and enhance user experiences.

Education

California Polytechnic University, Pomona **Fall 2022 - Fall 2024**
Bachelor of Science, Computer Science

Projects

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1. Squad Seeker (Android App Development using Flutter)

- **Description:** Developing an app for gamers to find teammates.
- **Key Features:**
  - User profile creation with game library and proficiency level options.
  - Teammate search based on skill, language, region, game, game mode, play style, and schedule.
  - Messaging system for communication and scheduling game sessions.
  - Rating and feedback system displayed on user profiles.
- **Achievements:**
  - Successfully developed a comprehensive user profile system with customizable game libraries.
  - Implemented advanced search algorithms for efficient teammate matchmaking.
  - Integrated a robust messaging system for seamless communication between users.
  - Backend powered by Firebase, utilizing the Realtime Database for data storage and retrieval.
  - Currently in Google play publishing process

2. VR Volleyball

- **Description:** Developing an immersive VR Volleyball game with realistic physics and animations using Unity3D and C#.
- **Key Features:**
  - Realistic ball physics and fluid player animations for lifelike gameplay.
  - Realistic NPC model movements and algorithms.
  - Real-time scoring and player statistics tracking.
- **Achievements:**
  - Successfully implemented advanced physics algorithms for accurate ball movement.
  - Collaborated on a team to ensure seamless multiplayer functionality.
- Expected Completion Date: 2024

3. 24 Hour Hackathon Project: On-Campus Dining Guide (Full Stack Development)

- Description: Web application designed to help students and visitors find dining options on campus quickly and efficiently. Utilizing full-stack development techniques, the project offers a user-friendly interface with comprehensive filtering and search functionalities.

- Key Features:

- Comprehensive Dining Directory: Provides a complete list of dining options available on campus.
- Filtering System: Allows users to filter restaurants based on dietary preferences such as vegan, vegetarian, and gluten-free options
- Restaurant Information: Displays detailed information about each restaurant, including hours of operation, menu offerings, and contact details.
- Integration with External Websites: Provides direct links to the websites of each restaurant for additional information and online ordering.

- Achievements:

- Rapid Development: Successfully developed a functional prototype within the time constraints of a 24-hour hackathon.
- User-Centric Design: Prioritized user experience by implementing intuitive navigation and efficient search functionalities.
- Comprehensive Information: Compiled and presented detailed information about each dining option, enhancing the user's dining experience on campus.

4. VR Sword & Pistol Experience

- Description: Created an immersive VR experience with swordplay and shooting elements using Unity3D and C#.

- Key Features:

- Dynamic VR slicing mechanics and realistic pistol shooting with recoil.
- Seamless scene loading for continuous and engaging gameplay.
- Integration of OVR package for enhanced VR interactions.
- User Interface (UI) interactions for improved player engagement.

- Achievements:

- Implemented advanced VR slicing mechanics and realistic pistol mechanics.
- Achieved seamless scene loading and enhanced VR interactions with the OVR package.
- Designed user-friendly UI interactions for easy navigation.

5. 3D World Generator in Apache NetBeans (Java)

- Description: Developed a dynamic 3D world generator in Apache NetBeans using Java, simulating a Minecraft-like environment.

- Key Features:

- Implemented random chunk generation for a diverse and dynamic world.
- Created landscape manipulation tools for user interaction.
- Enables the transformation of chunks into a Nether world for added complexity.

- Achievements:

- Efficiently implemented algorithms for random chunk generation.
- Developed intuitive landscape manipulation features.

6. Oculus Quest Development with Unity (Udemy Course)

- Description: Completed an online course covering the fundamentals of developing virtual reality experiences for the Oculus Quest using Unity.

- Key Features: Hands-on tutorials, practical projects, expert guidance.

- Achievements: Comprehensive training in Oculus Quest development using Unity, covering topics such as Oculus Controllers, XR Interaction Toolkit, UI Interactions in VR, VR Slicing, VR Scene loading, Full-body VR System with Final IK Avatar, and VR Shooting

Skills

- **Programming Languages:** Java, Python, C++, C#, C HTML, CSS, Javascript, Dart
- **Development Tools:** Unity, Visual Studio Code, IntelliJ, Eclipse, Android Studio, Firebase, Flutter, Jupyter Notebook, Apache NetBeans, Microsoft Visual Studio
- **Technologies:** Object-Oriented Programming, Algorithms & Data Structures, Mobile Application Development, VR Development, Wireshark
- **Operating Systems:** Windows, Kali Linux, Mac OS
- **Version Control:** GitHub, Git
- **Office Applications:** Word, Excel, PowerPoint, Outlook
- **Languages:** English, Armenian