

William Scott Juarez Clark

Software Developer

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[Portfolio](#) | [LinkedIn](#)

SUMMARY OF QUALIFICATIONS

- Proficient in 3D development with emphasis on real-time interaction, leveraging game engines and programming expertise in C++, C# and Python
- Skilled in project management and team leadership, including experience in hiring, team-building, and setting measurable project benchmarks.
- Demonstrated expert-level troubleshooting and debugging skills across hardware and software platforms, with a strong record of mission-critical issue resolution
- Foundational knowledge in React, machine learning and backend programming in addition to active pursuit of a Bachelor's of engineering degree in Software Development

EDUCATION

BACHELOR OF ENGINEERING | Software Engineering | Oregon State University 2023-2025

GPA: 3.85 **Relevant Coursework:** Data Structures, Web Development, Discrete Math, Python I and II, Assembly x86

MASTER OF ARTS | Music Technology Innovation | Berklee College of Music 2013-2014

BACHELOR OF ARTS | String Bass Classical Music Performance | San Francisco Conservatory of Music 2008-2012

CERTIFICATIONS

Coursera: Imperial College of London | Mathematics for Machine Learning Specialization: Linear Algebra, Multivariate Calculus, PCA

PROGRAMMING PROJECTS (See my [Portfolio](#) for a complete list of projects)

- **Touch Designer Visuals:** I have created a large collection of cross-functional, real-time video compositions and audio visualizers using OpenGL, Python and C# that can be loaded, played back and manipulated in real-time. This project was developed over a 15-year career as a professional video operator for premiere music performances and events.
- **Bass Bot:** Designed and built a monophonic synthesizer using C++ and the Juce framework, showcasing modular design and integration of custom audio DSP algorithms.
- **Atomic Chess:** Created a chess game with non-standard rules, to be played in terminal. Made with Python implementing advanced data structures and algorithmic logic.
- **Jelly Racer:** Built a racing game using C#, Unity and Wwise, winning first place at the JellyJam 2022 Game Jam for innovative gameplay.

TECHNICAL SKILLS

- **Languages:** Python / C++ / C# / JavaScript / x86 Assembly / CSS / HTML5
- **Software Development:** Modular Design Patterns / Git & Github / Linux / Machine Learning / AI / Data Structures / Web Development / Pycharm / Visual Studio / Xcode / Pandas / Matplotlib / AI Training / Bug Tracking
- **Frameworks:** JUCE Audio Framework / NodeJS / SQL / iOS SDK / Android Studio / Unix / Linux
- **Computer Hardware:** Enterprise, Multi-node Server design and build / Network Attached Storage management / Windows OS / OS development / Enterprise CPU and GPU Architecture / Embedded Software design / Cloud Storage and Computing
- **Real-Time Software Programming:** Unity (C#) / Unreal (C++) / Wwise (C++/C#) / Touchdesigner (Python) / Notch (Python) / Resolume (Python)
- **3D Softwares:** Cinema 4D / Touch Designer / Blender / Vectorworks / Notch / Insydium (X-particles) / Crealty / Prusa (3D Printing)

WORK EXPERIENCE

Audio Visual Artist / Server Technician | Colour Feeders (<https://ColourFeeders.com/>), San Francisco, CA 07/2016-Present

- Led the development of multi-node servers with a total build value exceeding \$500,000, managing systems for real-time video playback and data-intensive media processing using Python automation tools, C++, and Windows Server.
- Engineered complex networked audio-visual systems for large-scale, synchronized installations, demonstrating expertise in enterprise-level hardware and software networking infrastructure.

Video and Lighting Manager | The Midway SF (<https://theMidwaySF.com/>), San Francisco, CA 04/2017-2023

- Leveraged my network and communication skills to form and manage a team of over a dozen high-level, engineers to assist in the operation of a large size events venue, with over 200 diverse events each year
- Designed and implemented state-of-the-art infrastructure for high-profile events, including multi-node enterprise servers and real-time 3D video systems
- Collaborated on real-time applications using Python, C#, and TouchDesigner, integrating audio and visual systems for audiences exceeding 10,000

Instructor of Audio Technology | Pyramind Institute (<https://Pyramind.com/>), San Francisco, CA 02/2016-08/2024

- Taught advanced courses on software engineering, in-game development and audio-visual tools, including Sound Design for Video Games using Wwise and C#, and Synthesis & Sound Design using custom audio DSP in Reaktor

IT Assistant | Berklee College of Music (<https://Valencia.Berklee.edu/>), Valencia, Spain 08/2013-08/2014

- Assisted in managing IT systems, troubleshooting macOS, iOS and Windows environments, with responsibilities including network infrastructure upgrades managing user accounts through system admin privileges and maintaining regular help-desk hours