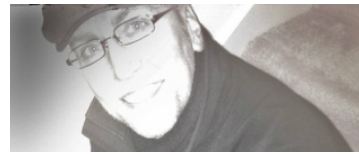# DUANE MOLITOR

duanemol@gmail.com
425.761.2416

Dist. Eng. & Project Manager specializing in innovation research in XR, AR & VR headsets, wearables, IoT, AI, CV/ML, NeRF, 3D volumetric streaming, BIM and AR mobile apps.   www.duanemolitor.com

PATENT AWARDS
- "Methods and Systems For Customizing Augmentation…", Primary Inventor, 2023
- "Smart Camera For Virtual Conferences", Designer, 2012

PROFESSIONAL EXPERIENCE

12/2019 – PRESENT
Distinguished Engineer/Partner Manager – Verizon Communications, Irving, TX
- Researched XR, AR/VR headsets, wearables, IoT, AI, CV/ML, NeRF, BIM & mobile.
- Developed 4 AR product PoCs to showcase 5G MEC for both Consumer & Enterprise.

01/2019 – 07/2019
Creative Director – SHFF, Inc., Austin, TX
- Hired and managed/trained internal and remote staff for Mixed Reality development.
- Designed and directed efficient procedures/processes for proprietary pipeline.
- Defined & prioritized deliverables via Agile/Scrum milestone schedule.

Key Projects: Angry Birds – Proprietary engine   **Virtual Masters Fishing** – Proprietary engine

11/2016 – 12/2018
Creative Director – Nerd Kingdom Inc., Irving TX
- Managed/mentored art & animation staff for VR games.
- Directed art & animation. Documented tools & processes for 3D asset development.
- Defined & prioritized deliverables via Agile/Scrum milestone schedule.

03/2015 – 01/2016
Creative Director – Fuzzycube Software LLC, McKinney TX   [*Acquired by Magic Leap]
- Led 5 internal AR projects to guarantee successful acquisition by Magic Leap.
- Reported to CEO and collaborated directly with client CCO at Magic Leap.
- Point-of-contact for AR app production with FL, CA, and UK partners.

06/2013 – 03/2015
Creative Director – Freelance Consultant, Frisco, TX
- Captured Dimensions, advised on post-capture techniques for transforming 3D scans.
- 900lbs of Creative, designed Perot Museum augmented reality (AR) app demo.
- shopVIDA.com, researched technical art solutions and partners to automate process.

02/2008 – 11/2012
Art Director – Microsoft Research (MSR), Microsoft Corporation, Redmond, WA
- Team leader, aided FASA Interactive's acquisition by Microsoft Corporation ($40M).
- Directed immersive entertainment experiences for AR/VR applications and created mobile apps for Microsoft HoloLens and Microsoft Mixed Reality Capture technologies.
- Recruited and managed vendor services and partners, including Japan, China, & India.
- Spearheaded augmented reality (AR) research initiative to define the newest discipline for development/differentiation for Microsoft Corp. Developed proposals for AR vision and cross-platform applications via interactive prototypes.
- Presented innovative technologies research to CEO executive staff, MSR leadership, and VR interactive incubation teams. Educated VIPs on competitive landscape in UX.
- Influenced purchase of team's first mocap system & AR eyewear for prototyping.
- Managed milestone deliverables. Mentored/trained employees on proprietary tools.

Key Projects: Microsoft HoloLens – AR eyewear   **Avatar Spectrum** – Xbox One Kinect
MR Capture Studio – HoloLens   **Avatar Kinect** – Xbox 360 Kinect

01/1999 – 02/2008
Art Director – Microsoft Xbox Studios, Microsoft Corporation, Redmond, WA
•   Partnered with Technical Art Director to plan and create an innovative character variation system that auto-generated a near infinite library of fully articulated 2D/3D characters based on gender, age, ethnicity, geography, and occupation. Library served all simulation into one platform – creating notable efficiencies in time/cost per character.
•   Collaborated with cross-functional leads on artistic goals of each game release. Defined supporting art pipelines and asset deliverables. Coordinated with program management to track/maintain schedules. Ensured high quality standards were exceeded/achieved.
•   Drove art style and character aesthetics. Developed art processes, skeletal rigs, and tools to improve animation blending, increase character variety, and introduce originality.
•   Determined art/animation production staffing requirements. Sourced talent agencies and vendors to aid recruiting. Managed teams through milestone deliverables. Trained employees on proprietary art/animation tools, new aspects of commercial tools. Mentored career development.
•   Identified new art software and top outsourcing vendors used by multiple internal studios.
•   Defined and documented Best Practice for Microsoft Studios' pro-bono 3D character vendor test.
•   Animated 3D characters and vehicles. Modeled and animated character blendshapes for lip-sync and facial expressions improving character emotion and facial performance.

Key Projects: Microsoft ESP – PC   **Gravity Kings** – Xbox prototype
Flight Simulator X – PC   **Forza 2** – Xbox 360 prototype
Shadowrun – Xbox 360   **MechCommander 2** – PC
MechAssault – Xbox launch title   **MechWarrior 4: Vengeance** – PC

08/1996 – 01/1999
Art Lead – FASA Interactive Technologies, Inc., Chicago, IL   [*Acquired by Microsoft Corp.]
•   Developed animation procedures for several proprietary animation systems.
•   Defined milestone schedules, assigned art tasks, and provided timely feedback.
•   Hired/managed art team. Worked with engineering teams to create proprietary art tools.
•   Art Director for MechWarrior 3. Plus, designed/art directed game user interface.
•   Animated characters and building destruction for game-ready art and in-game cinema.
•   Modeled and textured buildings, terrain, foliage, and effects including LODs & damage.

Key Projects: DisneyQuest's Invasion! – Location Based VR Entertainment (LBE)
MechCommander Gold – PC   **Red Planet** - LBE
MechWarrior 3 – PC   **Battletech** - LBE

SOFTWARE

•   Maya, 3DS Max, Photoshop, Unity, Premiere, After Effects, Sketchup, XSENS Studio
•   Slack, Confluence, Jira, ChatGPT, Perforce, Sourcesafe, Source Depot, MS Project+Office

EDUCATION

Columbia College, Chicago, IL
•   Advanced Computer Graphics postgraduate studies (2 yrs)
•   Bachelor of Arts, Major: Advertising & Graphic Design

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