DALE NEWCOMB, JR.

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SUMMARY

Senior Lead Programmer with VR experience stretching back to 1992, from military trainers to AAA games.
I am highly skilled in building and running efficient and cohesive cross-functional agile teams, resulting in high performance, high engagement, low turnover, and rapid ramp-up. My expertise designing and developing immersive experiences and applications includes virtual reality, games, simulation, and training systems. Creative problem-solving, attention to detail, and creating sustainable and scalable practices are notable strengths. As a servant-leader, I create impact and amplify the impacts of others, mitigate risks, and improve efficiency.

SKILLS

HARD: Virtual Reality (Quest2/Index/Vive/Rift/WMR) • Unity 3D 5.x-2021+ • Unity DOTS • SteamVR • Unreal Engine 4/5 • C#/C++/Java/C • Augmented Reality • Audacity • JIRA • Trello • GitHub • Perforce
SOFT: Agile Project Management (Scrum/Lean/Kanban/XP) • Servant Leadership • HR Management • Tuckman EI/EQ • DISC • Creative Problem Solving • Collaboration • Adaptability • Customer Interaction

AWARDS & CERTS

2020 Ubisoft Board of Directors Award Recipient • 2015 Appian Engineering MVP Award • Certified Scrum Master • Mobile Development Professional Certification Top 8 finish (of 90+ teams) and "Best Use of Vive Trackers" award at 2019 MIT Reality Virtually VR/AR Hackathon

EXPERIENCE

▶ Ubisoft Düsseldorf	Düsseldorf, Germany	2 years
Senior Lead VR Programmer	2020 – Present
Lead VR Programmer	2019 – 2020

Hired to build a 50 person development team focused on bringing AAA franchises to VR through full games built from the ground up for VR, starting with Assassin's Creed and Splinter Cell for the Oculus platform. Successfully fulfilled this responsibility, creating the strongest VR team within a 4-studio CoDev group of ~300 developers. Helped in hiring key roles, such as Art Director and Game Director, while leading the building and nurturing of a 20+ person VR Programming team. Worked directly with the Managing Director, Executive Producer, and Technical Director of the studio to guide current and future plans for VR development. Roughly 40% hands on programming time using C# in Unity (legacy and DOTS) and C++ in Snowdrop (internal engine) and leading the efforts of various small programming teams.
- Member of the 3Cs team on Assassin's Creed VR
- Led team to prototype high performance mobile VR engine using pure-ECS with Unity's DOTS
- Lead Programmer on the 3Cs team on Splinter Cell VR
- Contributed to creation of VR module for internal C++ Snowdrop engine
- Nominated member of the Ubisoft XR Community of Practice as an expert in VR Programming
- Maintained an 80% average engagement score for reporting hierarchy for 2 years (average is 67%)
- Conducted various presentations on Agile and Management topics to members of studio and CoDev

▶ LUCID DREAMS VR	Virtual/Remote	6 years
Founder, VR Designer/Developer/Producer (hobby projects / solo developer)	2016 – Present

Designer and developer of Virtual Reality (VR) experiences, focusing on highly immersive and intuitive room-scale applications for the HTC Vive and Oculus Rift using Unity. Responsible for end-to-end development of projects (including concept, design, coding, iterative grey-box gameplay testing, art and audio assets, marketing images and videos, etc.) managed on a Trello Kanban board.
- Published "Beach Bowling Dream VR" game to Steam in January 2017 for Vive (later for Rift/WMR)
- Published "The Glen" interactive music experience to WEARVR in January 2018 for Vive/Rift/WMR
- "Intruders Go Boom!!!" arcade party game for Vive/Rift/WMR (demo shown at Meetups - on hold)
- Contributor of bug reports and pull requests to open source SteamVR Unity Plugin git repository
- Development of "Dream Weavr" VR engine using pure-ECS approach with Unity's DOTS

▸ APPIAN | Reston, VA   5 years
Director, Software Development   2016 – 2019
Manager, Software Development   2014 – 2016

Brought in to manage the developers in a scrum team and serve as the scrum master. As the company headed towards IPO and the department started growing 30% annually, I spearheaded initiatives to provide scalability and scaffolding for growth. These efforts dramatically reduced our growth pains, helped form some core parts of our department's culture and earned me the department's MVP award.

- Squad Coach for an agile development team and manager of developers, managers, and squad coaches
- Formed and ran an Education Committee to expand upon the basic onboarding education and turn it into a departmental knowledge sharing system with crowd-sourced courses and a Q&A knowledge base
- Created formal promotion plan process for the department to fairly recognize & promote the right talent
- Refactored career paths and separated Project Managers into servant-leader Manager and Squad Coach
- Helped restructure the department to follow the Spotify model to improve scalability and facilitate IPO
- Published blog articles on [Servant-Leader Management](#) and [Creating a Learning Organization](#)

▸ CODE DONE RIGHT | Olney, MD   7 years
ScrumMaster/Product Owner/Designer/Developer (side project team)   2014 – Present

- Concept, interface design, business logic, artwork, website, and testing for Volleyball Lineup Tracker, an iPhone/iPad application for Volleyball coaches (~$6 app with 1700+ users worldwide as of Jan 2019).
- http://luciddreamsvr.com/vblineuptracker/

▸ DYNAMIC ANIMATION SYSTEMS | Fairfax, VA   17 years
Director of Product Development   2007 – 2014
Principal Software Engineer / Product Manager   2000 – 2007
Lead Software Engineer   1998 – 2000

Hired in to work on simulation & training contracts and went on to help the company grow from 13 to 75 people. Wore many hats along the way, including building a product development team from scratch that delivered several in-house game engines and pipeline tools plus turn-key training systems built upon them.

- Technical Producer and Product Manager for the entire product suite, mainly focusing on the Virtual Interactive Combat Environment (VICE), a high-end virtual reality training system (non-HMD).
- Executed a complete product life-cycle, from concept to market, including: vision, roadmap, design, development, docs, QA, pricing, marketing, quotes, installation, customer feedback and support.
- Led small cross-functional teams of developers, testers, artists, tech writers, and support personnel; including daily tasking through annual reviews as well as disciplinary actions and layoffs.
- Planned, set up, and ran a large (20'x30' and 30'x60') marketing booth to demonstrate VICE at numerous military and law enforcement conferences around the US, typically 2-3 times per year.
- Personally responsible for delivering over $20M of product to customers in the US and abroad.
- Dev Lead of team building a suite of C++/DirectX based graphics and simulation software SDKs, including ApexSDK, DasIG, Force game engine, Phantom, and art tools (Level Editor, importers, etc.).
- Lead developer on various 3D simulation software contracts on SGI, PC, and HP platforms.
- Development of user interface for Course of Action Analysis project for a military customer using Java.
- Origination of new game concepts, game design documents, concept art and animations.
- Producer and lead C++ developer on Pro Beach Volleyball game prototype.

▸ SAIC | Chantilly, VA   2 years
Product Manager   1996 – 1998

Product Manager for various products in the SIMTools family of simulation tools. Managed a small team of C++ developers, terrain/model artists, and technical writers, and provided software development support as needed.

▸ VICTORMAXX | Deerfield, IL   1 year
Lead VR Application Developer   1995 – 1996

Developed the application layer of the AutoDuel concept as a C++ software engineer. AutoDuel was intended to be a location based entertainment center based on the Car Wars role-playing game. The prototype included a car cockpit on a motion platform, haptic feedback, 3D sound, and a VR headset.

▸ GEMINI TECHNOLOGY | Irvine, CA   1 year
Simulation Software Engineer   1994 – 1995

Developed OpenGVS, a C software toolkit for real-time simulation, including 3D graphics, 3D sound, etc.

- Primarily responsible for 3D audio and particle effects subsystems of the OpenGVS toolkit
- Developed applications for customers including a flight-path noise visualization for SEATAC airport

▸ NAVAL RESEARCH LAB - ENEWS | Washington, DC   2 years
VR Programmer   1992 – 1994

CO-OP (Intern) in the virtual reality research lab developing in C/C++ on SGI workstations in OpenGL and Performer. My role was to explore new VR hardware (HMDs, data-gloves, etc.), create demos to show off their potential to high-level Navy officials touring the lab, and integrate with a new multi-speaker spatialized audio system. Created the Speech Activated Virtual Environment, modeled and textured the interior of our office space for use in demos, and co-authored a published paper on immersive 3D audio.

EDUCATION

UNIVERSITY of MARYLAND | College Park, MD
Bachelor of Science, Computer Science

GEORGE MASON UNIVERSITY | Fairfax, VA
Minors in Psychology & Philosophy