

Nick Vaccaro

Game Programmer

nickvaccaro.com

njvaccaro0@gmail.com

linkedin.com/in/NickJVaccaro

I'm a professional programmer with 11 years of experience, the last 3 of which I've spent working on a live MMORPG built with Unity, C#, and Java. Before that, I co-founded a gamedev company (Synersteel) and worked as a Full-Stack Web Developer (React, C#, JavaScript, SQL). I'm used to small teams and wearing many hats, with an affinity for the developing, project managing, and QA hats. I'm focused on results, and do whatever I can to help the entire team succeed.

Work Experience

Game Programmer (Unity) | *Elder Game LLC* | *Project: Gorgon* 2/2021 - Present

- Implemented several new systems, including: player mounts, climbable ladders, fishing framework, and new camera types (free-form and "action" camera)
- Redesigned Ability, Item, Quest, and Party UIs to display info concisely, with added functionality on both the client (Unity) and server (Java, Groovy, JSON)
- Improved animations across the board by converting legacy to Mecanim, implementing inverse kinematics, custom events, StateMachineBehaviors, and stick-to-ground logic for quadrupeds
- Optimized performance issues related to static batching, lighting, model and texture loading, third-party terrain, and UI logic, with the help of the built-in profiler
- Revamped a core interface, the targeting UI, from design to implementation with multiple iterations based on player feedback, accounting for hundreds of different entity types
- Sped up development and maintenance with custom editor scripts, refactoring of core systems to reduce duplicate code and improve runtime speed, and additional data validation
- Tackled hundreds of player-submitted bugs for both front-end and back-end, often interacting with players on our public Discord to gather additional info and provide bugfix updates

Game Programmer / Producer | *Synersteel Studio* | *Valley of Shadow* 8/2015 - Present

- Developing Valley of Shadow, a story-focused puzzle game built in Unity that we've presented at *PAX East*, *Tiny Teams*, *Cerebral Puzzle Showcase*, and more
- Design and implement puzzles primarily based around A* pathfinding in 3D space, CSG mesh manipulation, and light/shadow raycasting
- Created and continuously improve a robust trigger system with various activation methods and dozens of trigger types, including basic on/off, player control, object manipulation, analytics tracking, rendering interactions, and scene management
- Stay current with tech by converting to HDRP, utilizing VFX Graph for performance-critical effects, using Shadergraph and Prefab Variants, and keeping the editor up to date
- Lead production efforts through month-long Scrum sprints managed in Asana, analyzing and acting upon playtest feedback (both in-person and remote), participating in conventions and festivals, and composing patch notes and devlogs
- Utilize Unity's built-in tools with proficiency, encompassing Frame Debugger, Profiler, NavMesh, Audio Mixer, Input System, and Animations/Animators
- Customize the editor with new scene view gizmos, Inspector UIs, and data management tools, e.g. a script that finds and replaces all materials of a certain type through the entire game

Senior Software Developer | *Privakey, Inc.* 5/2019 - 9/2021

- Built admin portal in ReactJS + Redux to interact with backend, with 30+ components
- Designed and implemented React Native app with native Android library, with 10+ pages
- Led dev team as Scrum Master, ensuring regular Sprint meetings, QA, and code reviews
- Wrote and maintained 700+ unit tests, dozens of integration tests and storybook stories

Software Developer / Project Manager | *Privakey, Inc.*

1/2016 - 7/2018

- Architected, implemented, and publicly documented an OpenID auth server with dozens of secure API routes using Test-Driven Development with .NET (C#), MySQL, and Postman
- Built a fully responsive admin portal to interface with auth server in AngularJS
- Created front- and back-end samples as learning tools in .NET, NodeJS, and PHP
- Led daily Stand-Ups and Sprint Planning meetings as Scrum Master for team of 7-10 devs
- Hired and mentored software development interns

Software Developer | *Probaris Technologies*

9/2012 - 1/2016

- Developed web applications to manage identity credentials with ASP.NET (C#)
- Integrated software with physical fingerprint scanners in .NET
- Created and modified web services in .NET and Java

Skills

Languages C#, Java, Groovy, SQL, JavaScript, HTML/CSS**Frameworks** .NET, NodeJS, ReactJS, React Native, Angular**Tools** Unity, MySQL, MongoDB, Git, SVN, Gimp, DaVinci Resolve**Methodologies** Agile, Scrum, Kanban, Waterfall

Education

Drexel University

B.S. in Computer Engineering

2007 - 2012