

PATRICK JOST

SOFTWARE ENGINEER

PatrickBJost@gmail.com
+1 (732) 598-4769

US Security Clearance: TS

Software Development

Broad experience in the development and lifecycle of platform and web applications, focused on creating easily deployable and maintainable apps with reusable components and services in an Agile team environment. Workflow contains best practices including build automation, unit testing, continuous integration with multiple performers, and organized source management with techniques such as gitflow.

Web Development

Comprehensive understanding of the underlying architecture of modern web applications, the numerous languages and protocols employed for the frontend and backend, and how they securely communicate from the client-side UI and graphics to the backend through well-designed service endpoints for backend processing and database logic.

Game Development

Specialized expertise in the development of real-time interactive applications on numerous target platforms for both next-gen and casual gaming markets, with an intimate knowledge of the structure and implementation of gameplay systems and backend technologies.

Skills

Java	C / C++	C# / .NET
Javascript	Python	Shell scripting
Maven	Git	Docker
Agile process	Atlassian suite	NodeJS
AngularJS	ExpressJS	HTML5
Numerous DB's	LUA	OpenGL
Direct3D	Unreal Engine	Unity Engine

Platforms

Linux	Android	iOS
Windows	Xbox	Wii

Experience

Modus Operandi, Inc.

Software Engineer III

2012-Present

Work in a dynamic team as a full-stack developer for enterprise and government-funded research projects. The team utilizes the Agile software development process to effectively adapt to shifting project requirements. A number of projects involve helping clients solve big data problems within their organizations. This involves using a reasoner to make sense of their data and discover patterns in their stores such as Cassandra and Accumulo.

Took a lead development role on a large-scale workflow project involving collaboration with a number of performers located throughout the US. This required a continuous integration plan which employed the use of Vagrant, Packer, Stash, and Docker. A python script would kick off a chain of events resulting in the performers components being deployed to the clients host as a docker container, linked up with the other performers containers, resulting in a continuously integrated application usable by the client.

Additionally, led the research and development of a project which performed skeletal analysis and gesture recognition on video feeds. Gesture metadata, geospatial trending, and intelligence reports would be used to determine and notify users if actions of interest are occurring in the sensor feeds.

N-Fusion Interactive

Software Engineer

2004-2012

As a gameplay and generalist developer, designed and executed numerous gameplay and engine systems including player interaction, artificial intelligence, state persistence, rendering, effects, dynamic audio, physics, UI, networking, game-states, and ensuring compliance with target console requirements. Extensive engine experience includes Unreal, Unity, and Gamebryo. Also helped to develop significant portions of the studios in-house game engine.

As the principle tool developer, designed and implemented the studios' proprietary game and level editor, with major features including assets management, entity editor, scene navigation, lighting functions, script editor, material editor, and import and export to a number of platforms including PC, iOS, Nintendo Wii, and Nintendo DS. Ongoing maintenance and addition of feature components was required to meet the evolving needs of the studio and clients.

Shipped titles:

Deus Ex: The Fall (iOS)	Air Mail (iOS)	Leela (Xbox 360 / Wii)
Medieval Games (Wii)	Pajanimals (iOS)	Supple 2 (PC)
Martian Panic (Wii)	Go Play Circus Star (Wii)	Frontlines: Fuel of War (Xbox 360 / PC)
Hour of Victory (Xbox 360)		

Education

Full Sail University

Bachelors of Science: Game Development

2000-2004

Software Engineering	Design Patterns	Optimization
Artificial Intelligence	Linear Algebra	Physics
Real-time Graphics	Networking	Project Management