Patrick Abiney

Senior software engineer & manager with experience in applications, games, embedded systems, robotics, & websites.

EXPERIENCE

Babaroga, Chicago, IL — *Senior Software Engineer & Manager*
FEB 2021 - MAR 2024

Blind Squirrel Games, Santa Ana, CA — *Programmer II*
JAN 2020 - FEB 2021

TRIPP, inc., Los Angeles, CA — *Senior Software Engineer*
JAN 2018 - DEC 2019

Human Head Studios, Madison, WI — *Gameplay Programmer*
JUL 2015 - MAY 2016

Harris Corporation, Melbourne, FL — *SharePoint Developer*
DEC 2013 - DEC 2014

EDUCATION

Northwestern University, Evanston, IL — *M.S. Robotics*
SEP 2016 - DEC 2017

Full Sail University, Winter Park, FL — *B.S. Game Development*
AUG 2011 - JUN 2013

PROJECTS

The Lord of the Rings: Return to Moria — Third *person survival crafting RPG for Epic & Playstation 5.*
AUG 2023 - DEC 2023

- ❖ Lead & managed engineers for Babaroga's portion of development.
- ❖ Debugged & polished character & combat systems.
- ❖ Optimized custom environment queries & state machines.
- ❖ Fixed networking & replication bugs for gameplay.

Technologies: Unreal Engine 4, Visual Studio, Perforce, C++, Blueprints, Jira.

Five Nights at Freddy's: Security Breach - RUIN — F*irst person, fourth dimension, horror DLC for Playstation 4 & 5 & Steam.*
FEB 2022 - AUG 2023

- ❖ Lead & managed engineers for both Babaroga & an external client.
- ❖ Crafted AI using behavior trees, AI directors, & environment queries.
- ❖ Worked closely with designers & animators to develop systems, levels, & AI features.
- ❖ Expanded & debugged fourth dimension travel system to improve player experience & work with AI.
- ❖ Managed time estimates, & kept engineering on or ahead of schedule.

Technologies: Unreal Engine 4, Visual Studio, Perforce, C++, Blueprints, Jira.

Five Nights at Freddy's: Security Breach — *First person horror game for Epic, Playstation 4 & 5, Steam, Switch, Xbox One, & Xbox Series X & S.*
FEB 2021 - Feb 2022

- ❖ Lead & managed engineers for Babaroga's portion of development.
- ❖ Crafted Chica, Monty, Roxy, Vanny, & Burntrap Boss Battles.
- ❖ Developed Backstage, Daycare, Fazerblast, Gator Golf, Kitchen, Prize Counter, & West Arcade security office missions.
- ❖ Utilized a combination behavior tree & state machine AI to achieve different player experiences.
- ❖ Engineered systems for animation, game elements, & interactables.

Technologies: Unreal Engine 4, Visual Studio, Perforce, C++, Blueprints, Jira.

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LinkedIn

LANGUAGES

C/C++, C#, Python, x86, Java, JavaScript, JSON, SQL, HTML, CSS, XML, HLSL, GLSL, Matlab, CAML, XSLT

TECHNOLOGY SUMMARY

Application Programming Interfaces
Direct X, OpenCV, OpenGL, Maya, 3DS Max, Android, ROS, Baxter, Numpy, Boost, STL

Build Tools
CMake, Catkin, GNU toolchain

Databases
SQL Server, SQL Server Express, SQLite

Game Engines/Visualization
Unity, Unreal, Godot, RVIZ

Integrated Development Environments
Microsoft Visual Studio, Lattice Diamond, Android Studio, MPLAB X

Machine Learning
TensorFlow, TFLearn, Scikit-learn, Surprise

Network/Web Frameworks
Winsock, ADO.NET, LINQ, Entity, Web Services, SOA, WCF, Windows Workflow, jQuery, AJAX, .NET

Version Control
GIT, Perforce, Subversion, Google Code, Team Foundation Server

Sprint Planning/Production
Confluence, Google Docs, Hansoft, Jira