Marek Vymazal

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SKILLS

TypeScript
JavaScript
Python
C#
Java
C++
HTML
CSS
SQL
Interactive Design
Tools Development
Pipeline Automation
Illustrator
Photoshop
Unity
Godot
GDScript
BabylonJS
Maya
MEL
Blender
NodeJS
Express
Docker
AWS
S3
DynamoDB (NoSQL)
Google Cloud Platform
Stripe

EXPERIENCE

Freelance Software Developer

2019 – Present

Engelmann-Becker / Funnix · Funnix (Web Application), Proprietary Internal Tools (Web Application)

- Converted an outdated desktop program into a modern web-based subscription service using Node.js and AWS Elastic Beanstalk, creating a high-performance single-page application (SPA).
- Developed a custom data migration tool to transition legacy content to a web-compatible format, ensuring a smooth conversion.
- Designed and implemented a lesson player using JavaScript for seamless navigation and progress tracking.
- Built full front-end and back-end systems, including user authentication, lesson management, and data handling, with Node.js and DynamoDB.
- Implemented a subscription billing system with Stripe for recurring payments and integrated ActiveCampaign for automated email marketing and engagement.
- Established a nightly reporting process to monitor system performance and user metrics.
- Led the development of an online bookstore with USPS media mail integration for shipping.
- Automated deployment and operational tasks, optimizing workflows and reducing downtime.

Indie Game Developer
2017 – 2019

Self Published · Survival Arena (Roblox)

- Developed a game as a sole indie developer, handling all aspects of coding, design, and release.
- Programmed the game in Lua, ensuring it was engaging for a single player while accommodating multiple players seamlessly.
- Designed the gameplay experience to remain fun and engaging even if only one player remained in the game session.
- Designed 5 unique game modes, each featuring procedurally generated levels to maximize replayability.
- Achieved over 500 active players at the game's peak and over 100 thousand players in its lifetime, demonstrating strong player engagement and retention.
- Earned an 84% positive feedback score, reflecting a high level of player satisfaction and consistently positive user experiences.

Senior Software Engineer (Generalist)
2016 – 2017

Glu Mobile · Ultimate Chef (iOS / Android)

- Designed and implemented over 40 modular user interfaces in Unity, collaborating with engineers to address functionality and limitations.
- Increased productivity by 25-70% by developing pipeline tools for Maya and Unity using Python and C#.
- Managed character animation, creating and implementing over 80 animations and sequences, along with 3D environment layout and lighting.
- Led outsourcing by creating technical guidelines and specs for 280+ assets
- Optimized performance with Python tools, reducing project size by 55%.

(Lead) Programmer / Consultant
2015

Committee for Children · Game (Research / Proprietary)

- Created rapid prototype for an interactive multiplayer game for research study in Unity.
- Designed user interface to support four player mixed local and network co-op multiplayer.

(Lead) Programmer
2012 – 2014

Northwest Media · Surviving Independence (iOS / Android)

- Responsible for all programming using C# and Unity, writing over 40,000 lines of code.
- Designed and developed UI with responsive buttons, seamless transitions and effects for touch interactions.
- Developed procedural generation systems to increase replayability, which included, dynamic characters and personalities, different map locations, and varying store prices, job wages, and apartment costs.
- Addressed usability issues from user tests and feedback through game hints, improved visual indicators, and refined UI flows.
- Added user analytics for user research and efficacy studies, which included all user actions, in internal device XML files and SQL databases.

Designer / Senior Technical Artist
2012

Zynga · Pioneer Trail (Facebook)

- Worked with designers to release new content in bi-weekly intervals.
- Used metrics to drive upcoming features, maximizing revenue potential for each release.
- Developed XML, Photoshop, and Flash tools, boosting productivity by 15% to up to 25%.

Technical Artist

2007 – 2012

Buzz Monkey Software · Tomb Raider: Underworld (Wii), Tony Hawk: Ride (Wii), Tony Hawk: Shred (Wii), Army of Two: 40th Day (PSP), Rinth Island (iOS / Android), Club Penguin (iOS / Android)

- Responsible for developing tools and pipeline automation used by over 15 individuals in art and design departments, improving overall efficiency by 25% up to 70%.
- Developed tools for Unity and Maya using Python, JavaScript, and C#.
- Produced rapid prototypes in Unity, transforming design concepts to playable demos.
- Designed camera state machines, particle effects, animation systems, and audio triggers, adding depth to game mechanics and visuals.

Artist

2006 – 2007

Buzz Monkey Software · Tomb Raider: Anniversary (PSP), Tomb Raider: Underworld (Wii), Tony Hawk: Ride (Wii)

- 3D modeled, textured, and lit environments for over 12 levels using Maya and other 3d packages.
- Created art for three game environments, which became the quality standard for the art department (Tony Hawk: Ride).
- Responsible for cinematics, upholding visual quality through various level design iterations.
- Optimized over 20 levels for performance, reducing memory over 35% to up to 60% by optimizing geometry and textures.

EDUCATION

Bachelor of Science in Game Art and Design

2003 – 2006

The Art Institute of Portland