

Robin Vierich

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Skills Summary

- 10 years of professional game programming experience
- Strong C++, gameplay programming, AI, rendering, and optimization skills
- Proficiency in linear algebra, 3D math, and physics simulation
- PC, console, mobile, and VR experience with tools like UE4, Unity, and PhyreEngine
- Supportive technical leader focused on cultivating a harmonious, productive environment
- Excellent translator of technical concepts to non-technical team members

Work Experience

Lead Programmer

Beans

April 2019 - February 2023

- Led the technical development of an unannounced new IP published by Devolver Digital
- Responsible for core gameplay systems including: combat, AI, character control, interaction, inventory, status effects, and pickup/throw
- Hired team of 3 programmers and supported their growth through mentorship, weekly check-ins, feedback, and transparent communication
- Implemented many engine-level graphics changes to achieve desired art direction
- Led development of a dynamic skinned mesh decal rendering system supporting thousands of unique decal materials applied at runtime with very low overhead
- Collected cross-team feedback regularly to improve APIs, tools, and scripting guidelines
- Coordinated with production, QA, design, and creative to fulfill milestone requirements with a stable build every 6 weeks

Gameplay and AI Programmer

Capybara Games

Nov 2016 - Mar 2019

- Created a complex tentacle monster character with coordinated kinematic limbs
- Built efficient multi-threaded AI systems for environment queries, utility-based decisions, influence map generation, and directional obstruction tests
- Optimized AI targeting and occlusion algorithms gaining over 10x speedup
- Made intuitive UI tools for tuning behaviour, movement, pathing, and enemy swarming
- Extended shaders to support 2nd UV channel, UV animation, and texture blending

Technical Lead

Uken Games

April 2016 - Nov 2016

- Lead a team of 4-6 developers, released a multi-platform live mobile game
- Built pipeline tools for game updates, and reconciliation of client and server user data
- Provided accurate time and cost estimates to product team
- Built a GOAP bot inspired by AI systems in F.E.A.R. for stress testing

Software Developer

Uken Games

May 2013 - April 2016

- Built new gameplay systems for online mobile titles
- Profiled and optimized Android GPU performance and memory usage

Lead VR Software Developer

University of Guelph, CDRU

August 2007 - May 2013

- Sole developer of room-scale VR simulation used to research child pedestrian behaviour
- Implemented traffic AI, participant interactions, data collection, data analysis systems.
- Designed researcher-facing tools for trial setup, content creation, and data analysis

Talks

A Dark Mind: The AI of "The Dark" in BELOW - <http://bit.ly/3EzLMA9>

Presented at GDC 2019

Education

University of Waterloo

Sept 2007 - April 2013

Bachelor of Applied Science, Honours Computer Engineering, Cooperative Program