TRISTAN JAMES HOLUB

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tristanholub.com

SKILLS

PROGRAMMING: C#, C++, Python, Java, NodeJS, JavaScript, HTML5, CSS, Bash, C, OpenGL, GLSL
SOFTWARE: Unity 3D, Maya, RenderDoc, Microsoft Office, Photoshop, Illustrator
PROJECT MANAGEMENT: Agile/Scrum, Git, Perforce, JIRA

EDUCATION

DREXEL UNIVERSITY, PHILADELPHIA PA — ANTICIPATED GRADUATION: JUN 2023
College of Computing and Informatics — CUMULATIVE GPA: 3.83
Bachelor of Science in Computer Science
Concentration in Game Programming and Development

WORK EXPERIENCE

AMAZON ROBOTICS — Westborough, MA — MAR 2022 – SEP 2022
Software Engineer CO-OP

- Updated and automated onboarding processes to improve accessibility for new customers.
- Added new back-end functionality to automatically allocate resources to new users with AWS.
- Redesigned front-end pages to be more user-friendly and reflect the automation update to increase accessibility.
- Researched and developed prototype back-end solutions for new features.
- Discussed vision and needs with multiple teams when designing tools.

ANALYTICAL GRAPHICS, INC. — Exton, PA — MAR 2021 – SEP 2021, APR 2020 – SEP 2020
3D Graphics - Jr. Programmer/Developer CO-OP

- Added support to the STK3D Engine for multiple glTF model extensions including EXT_mesh_gpu_instancing (instanced rendering), EXT_meshopt_compression (mesh optimization), and KHR_textures_basisu (texture compression).
- Wrote new loaders for the i3dm model format, a payload delivered by 3D Tilesets that describes instanced glTF models.
- Updated glTF models with KTX2 compression support for Image Based Lighting.
- Core contributor to the STK3D Modernization effort with the end goal of rendering a minimal scene in STK using a Core OpenGL profile.
- Delivered multiple presentations discussing performance improvements and feature additions shipping in future product versions.

PROJECT EXPERIENCE

DONUT DUNKERS: 3D Puzzle Game — SEP 2021 – DEC 2021
Production Lead, UI Developer

- Worked closely with different disciplines within the team to create and assign tasks, as well as identify roadblocks and brainstorm solutions.
- Collaborated closely with other UI Developers and Designers to create a fluid and user-friendly UI in the game.
- Ran playtests and organized survey data into reports to allow the team to iterate and develop based on user feedback.

HEAVY METAL: VIRTUAL REALITY MECH GAME — JAN 2019 – JUN 2019
Project Leader, Developer, Designer

- Collaborated with classmates over six months to design and develop a virtual reality game in Unity 3D.
- Developed C# scripts to support core gameplay functions such as user interaction, weapon firing, and player movement.
- Created 3D models and animations using 3DS Max for use in the game's development.
- Lead the team during meetings/development sessions as well as managed the task timeline, holding teammates accountable to deadlines and adjusting the overall project flow as necessary.

RELEVANT COURSEWORK

Artificial Intelligence	Computer Graphics
Linear Algebra	Data Structures
Computer Game Design & Development	Fundamentals of Physics I, II, III
Advanced Computer Programming	Game AI Development
Web and Mobile App Development	Differential Equations

HONORS AND AWARDS

DEAN'S SCHOLARSHIP, Drexel University — 2018 – *PRESENT*
DEAN'S LIST, Drexel University — 2018 – *PRESENT*

ACTIVITIES

LEAGUE OF LEGENDS E-SPORTS COMPETITOR, Drexel E-Sports — 2021 – *PRESENT*
ENTRPRENEURIAL GAME STUDIO, Drexel University — 2019 – *PRESENT*
MATHEMATICS & COMPUTER SCIENCE SOCIETY, Drexel University — 2018 – *PRESENT*