Tobias Brandner

Semmelstr. 9

97070 Würzburg

□ 0179 8298854

□ tobias.brandner@gmx.com

ZeniMax Media Inc id Software Würzburg, 30. Oktober 2024

Application for Engine Programmer (Frankfurt, Job ID 2021-2042)

Dear id Software Team,

I am excited to apply for the Engine Programmer position at id Software and contribute to delivering excellent gaming experience for FPS games, including the iconic DOOM series. With a background in games engineering and machine learning for real-time interactive systems, I am eager to advance game engine technology and help push the boundaries of game performance and visual fidelity.

In my Bachelor's studies, I built a solid foundation in games engineering, learning skills that ranged from gameplay programming and plugin development to constructing a game engine from scratch using C++ and OpenGL. Although working on a game engine was both challenging and rewarding, it solidified my passion for the intricate world of real-time interactive systems. Recognizing the complexity and value of this area, I chose to tutor a course on game engine development at my university. Here, I helped new students understand rendering fundamentals while strengthening my technical communication skills.

For my Master's degree, I specialized in artificial intelligence, merging this focus with my love for game engines in my thesis project. I developed a neural network for real-time rendering super-resolution, designed to enhance frame rates and resolution for high-demand games utilizing geometry buffer information. This experience taught me valuable lessons about integrating machine learning with real-time interactive systems, a skill that I believe could be valuable for the goals at id Software. In addition, I have worked on various game projects, including Abyssal Enigma, a first-person deep-sea exploration game where I managed animations and implemented gameplay mechanics, and Boss'n Run, a 3D jump'n'run demo focused on analyzing and visualizing movement behavior. This work led to a publication at the IEEE Conference on Games in Milan this year, where I presented my findings.

While I have not yet worked directly with DirectX 12, Vulkan, or Qt, I am enthusiastic about expanding my skill set in these areas and learning more about cutting-edge engine development techniques for FPS games. I am confident that my technical foundation, dedication, and enthusiasm for game development align well with your team's mission.

I am excited about the prospect of contributing to id Software in this role. Although I am early in my career, I am eager to apply my skills and grow within your team. Thank you for considering my application, and I look forward to the opportunity to discuss how my experience and ambitions align with id Software's goals.

Sincerely,

Tobias Brandner

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