

Kevin Carey – Game/Networking Programmer

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OBJECTIVE

Entry level position, preferably in the area of networking, on a game programming team.

GAME PROJECTS

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| Glitch (Junior/Senior Game) | Programmer/Producer | Team of 5 |
| <ul style="list-style-type: none">▪ First person shooter based on entities made entirely out of particles.▪ Developed in C++ for Windows.▪ Thoroughly expanded and improved previous networking engines.▪ Created a robust packet interface that allowed for easy serialization to and deserialization from a network stream.▪ Implemented class factories specific to the memory management needs of the networking engine.▪ Designed and created a C# tool that generated the C++ code files necessary to create a new packet, which significantly simplified the packet type creation process.▪ Game, code samples, and videos available at: http://www.digipen.edu/~kcarey | | |
| Egnar 85521C (Individual Junior Game) | Programmer | Team of 1 |
| <ul style="list-style-type: none">▪ First person stand-in-place shooting range game.▪ Developed in C# with XNA Game Studio Express for Windows.▪ Built a base framework that incorporated all of the necessary aspects to make the game.▪ Designed and coded a simple but easy to use graphics engine that could display .X model files, sprites, and text.▪ Coded a game-specific physics engine that handled object velocity, gravity, and collision.▪ Created a game event interface that made it easy to add key features to the game logic.▪ Game, code samples, and videos available at: http://www.digipen.edu/~kcarey | | |
| Lotus Project (Sophomore Game) | Programmer/Product Manager | Team of 4 |
| <ul style="list-style-type: none">▪ 2D top-down squad-based shooter in a 3D environment.▪ Developed in C++ for Windows.▪ Designed and coded a robust networked multiplayer using WinSock 2, coded a reliable UDP system, and implemented predictive movement.▪ Coded game content including user interface for menus, HUD, and item pickups. | | |
| The Myth of Madlez (Freshman Game) | Programmer/Technical Director | Team of 6 |
| <ul style="list-style-type: none">▪ Real-time text-based console adventure game.▪ Developed in C/C++ for Windows.▪ Wrote the technical specification and built the base framework.▪ Coded real-time input and output, collision detection, and menu system. | | |

WORK EXPERIENCE

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| Teacher | DigiPen Institute of Technology | Summer 2005-2007 |
| Taught C++ and Project Fun, DigiPen's proprietary game creation software, to high school students over the course of two week workshops. Taught more than 200 students over the course of three summers. | | |
| Teaching Assistant | DigiPen Institute of Technology | Fall 2005 |
| Tutored programming students in freshman game development class. | | |

SKILLS

Programming and Software

Languages : C/C++ (4 years), C# (1 year), XNA Game Studio Express (1 year), Java (1 year), GBC Assembly (1/2 year), JavaScript (1/2 year), Flash and ActionScript (1/2 year).
Networking : WinSock 2 (2 years).
Graphics : DirectX (1/2 year), OpenGL (1 year).
Audio : FMOD and FMOD Designer (1/2 year), DirectSound (1/2 year).
Other : Hammer Editor (1/2 year), 3D Studio Max 8 (1/2 year), Microsoft Visual Studio 2003 (4 years), Microsoft Visual Studio 2005 (3 years), SVN (source control) (4 years), Microsoft Windows XP, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Project.

Course Work and Technical Skills

Networking : Client/Server, LAN, TCP/IP, UDP, Reliable UDP, Predictive Synchronization.
Graphics : Fixed-Function Pipeline, Ray Casting, Phong Lighting and Shading, Texture Mapping and Mipmapping, BSP Trees, Hierarchical Occlusion Maps.
Physics : Motion Dynamics, Waves and Optics, 2D Collision.
AI : State Machines, Pathfinding (A*, Dijkstra), Random Map Generation.
Math : Linear Algebra, Calculus, Discrete Math, Curves and Surfaces, Quaternions, Probability and Statistics.
Other : Standard Template Library, Debugging, Optimization, Data Structures, Data Compression and File Formats, Memory Management, Software Engineering.

EDUCATION

B.Sc. in Real-Time Interactive Simulation (Computer Science)
DigiPen Institute of Technology – Redmond, WA

Graduation: April 27, 2008

REFERENCES

References available upon request.