

SEAN KELLY

VIDEO GAME ENGINEER

Sean Perry Kelly
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Game Engineer with software and hardware background seeking console or custom PC programming position in a <200-person studio. Some design input/ownership a plus. Has experience working closely with other disciplines. Currently available for internships summer 2008, possible full-time starting summer 2009.

Education

Carnegie Mellon University: BS in Electrical & Computer Engineering (2007 - 3.63QPA) MET from Entertainment Technology Center (2009)

Full relevant course list w/ descriptions available as separate document

Work Experience

Schell Games (2007) Intern Game Engineer

Immersive interactive ride for WDI
contact: Prof. Jesse Schell

Carnegie Mellon University ECE Department (2006) Research Intern

Multiprocessor resource sharing experiments
contact: Prof. Don Thomas

National Institute of Standards and Technology (2003, 2002) Student Researcher

Data mining & 3D immersive visualization
contact: Dr. Judith Devaney

Projects

[WDI Ride Project] (Schell Games: Python/Panda3D 2007)

3D sound, scene, sim & test programming;
hardware debug for interactive Disney ride

Galaxxon Legacy (academic/personal: C++ Mac/PC 2007-present)

highly-customizable top-down arcade
shooter with bump-mapped sprite graphics

RotoNinja (academic: C++ PC 2007)

rotating 2D puzzle-platformer with bump-
mapping, A* pathfinding

NMOS 6502 (academic: Verilog 2006)

CPU of the NES, implemented at func-
tional level & synthesized to FPGA

chiptune (personal: C++ UNIX/OSX 2005-present)

file parser & waveform audio synthesizer:
standalone app + streamable audio lib

HexS (personal: NES ROM 2004)

strategic virtual board game with player AI

Galaxxon III (academic: NES ROM 2004)

shoot-'em-up with levels, basic enemy AI

JDE (personal: JAVA applet ~2002)

Java applet online DDR engine

Relevant Skills:

C, C++, JAVA, Python, ML, Verilog,
Matlab, HTML, PowerLisp, various
BASICS, LOGO, Inventor, VRML 1.0
CodeWarrior, ProjectBuilder, XCode, gcc,
Perforce, Cadence/Virtuoso, Adobe
Illustrator, Adobe Photoshop, various
hexadecimal editors, various video suites,
various Office suites, DOS, Windows
(3.1-XP), MacOS (7.x-X10.4.x), PalmOS,
UNIX/Linux/Xwindows

Awards:

- 2007 • CMU Honors Medallion
- 2004 • Spring, Fall CMU Engineering Honor Roll
- 2003 • Fall CMU Engineering Honor Roll
- 18-100 Robot Customization Project award
- 2002 • College Board National Merit Honorable Mention
- National Honor Society induction
- 2000 • **Eagle Scout award**
Boy Scouts of America,
Troop 1450
(Rockville, MD)
- Bronze & Gold Eagle Palms

Extracurriculars:

- Carnegie Involvement Association buggy team: Head Mechanic / design support
- Carnegie Mellon Kiltie Band (dir. Paul Gerlach): Trumpet 1

Hobbies:

- Video games (esp. older consoles)
 - playing
 - programming
 - reverse-engineering
- Music
 - trumpet (esp. jazz)
 - digital arrangement
- Webcomics
 - community
 - creation (www.g33xnexus.com/diodes)
- Swimming
- Culinary experimentation
- Backpacking & camping