

SEAN KELLY

VIDEO GAME ENGINEER

Sean Perry Kelly
5517 Wilkins Avenue
Pittsburgh, PA 15217
spkelly@alumni.cmu.edu, sean@psychsoftware.org
http://www.psychsoftware.org/portfolio
(860) 335-7752 (works, but e-mail contact is preferred)

Game Engineer with software and hardware background seeking long-term employment in game engine or gameplay programming, tracking towards level/scenario or gameplay design. Has worked independently on multiple gaming projects, but can also work in, and has successfully led, a small cross-disciplinary team. Currently available full-time starting late summer 2009.

Education

Carnegie Mellon University:

BS in Electrical & Computer Engineering (2007 - 3.63QPA)

MET from Entertainment Technology Center (2009 - 3.69 QPA)

Relevant course list w/ descriptions available as separate document

Work Experience

National High School

Game Academy (2008)

Advanced Programming Instructor

Teaching tech to programmers and artists

contact: Ruth Comely

rcomely@andrew.cmu.edu

Schell Games (2007)

Intern Game Engineer

Immersive interactive ride for WDI

contact: Prof. Jesse Schell

jschell@andrew.cmu.edu

Carnegie Mellon University

ECE Department (2006)

Research Intern

Multiprocessor resource sharing experiments

contact: Prof. Don Thomas

thomas@ece.cmu.edu

Sample Projects

Tekunoma

(academic/personal: C++ Mac/PC 2008-present)

2D action RPG; procedural dungeons, graphics, items, etc.

Steam Roller

(NHSGA demo: Python/Panda3D 2007)

3D rollerball race/puzzle, including home-brew traction & recoil physics

Mandelbrot Set

(personal: NES ROM 2008)

fractal demo, with music, in 6502 ASM

Toy Story Mania

(Schell Games: Python/Panda3D 2007)

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

Galaxxon Legacy

(academic/personal: C++ Mac/PC 2007-2009)

sh'm'up with flexible mission & weapon systems; bump-mapped sprite graphics

NMOS 6502

(academic: Verilog 2006)

CPU of the NES, implemented at functional 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

Relevant Skills:

C, C++, JAVA, Python, AS3, ML, Verilog, Matlab, HTML, CSS, PowerLisp, various BASICs, LOGO, Inventor, VRML 1.0 CodeWarrior, ProjectBuilder, XCode, gcc, Perforce, Cadence/Virtuoso, Adobe Illustrator, Adobe Photoshop, Autodesk Maya, various hexadecimal editors, various video suites, various Office suites, DOS, Windows (3.1-Vista), 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