Nirav Patel

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Current Address:
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Education

Carnegie Mellon University: Pittsburgh, PA
B.S. Electrical and Computer Engineering: May 2009
GPA: 3.18/4.00 Major: 3.30/4.00

Work Experience

Google Summer of Code, One Laptop Per Child
Developer: Summer 2008

- Designed and developed open source camera and computer vision libraries in C and Python for the Linux based operating system on OLPC's XO laptops.
- Collaborated with an international community of developers and users.
- Enabled camera use on the over one million XO laptops deployed in third world countries.

Palau Ministry of Health: Koror, Palau
Technology Consultant: Summer 2008

- Developed sustainable technology solutions for the Ministry of Health through Carnegie Mellon's Tech Consulting in the Global Community program.
- Trained hospital staff in database design and use.

Dominion, Millstone Nuclear Power Station: Waterford, CT
Electrical Engineering Intern: Summer 2007

- Analyzed and updated databases of plant components and processes as a member of the Nuclear Design Basis team.
- Planned site wide Wi-Fi deployment for over 1,000 users.

Westbrook High School: Westbrook, CT: IT Technician: Summer 2005, 2006

Research Experience

Vision and Mobile Robotics Laboratory: Carnegie Mellon University: Fall 2008

- Improved accuracy of computer vision based localization using Matlab.

Projects

Wireless Networked Crowd Interaction Wands: Embedded Systems Design: Spring 2009

- Designed and built AVR powered, ZigBee networked wireless game controllers, or Wands.
- Devised and developed wand, server, and game side network architecture using C, Java, and Python.
- Developed crowd games in Python which use computer vision and accelerometer input.

8-bit ALU: Analysis and Design of Digital Circuits: Fall 2007

- Designed ~1500 transistor ALU from Verilog through laying out silicon in Cadence.

Skills

Operating Systems: GNU/Linux, Windows, OS X
Software: Matlab, Git, Maya, OpenGL
Programming Languages: C, Python, C++, Java, ARM assembly, Lua, GLSL

Leadership & Activities

Student Technology Outreach: Program Coordinator: 2007-2009

- Initiated computer recycling program to repair and distribute computers for non-profits.

Pygame: Core Developer: 2008-2009

- Continued camera and graphics library development in Python and C.

Sugar Labs: 2008-2009

- Continued software development for One Laptop Per Child.

Developmental Solutions Organization: Board Member: 2008-2009
Game Creation Society: 2008-2009

Awards

Carnegie Institute of Technology Dean's List: Fall 2008
Hack for Good Award: Yahoo! University Hack Day 2008