

# KYLE P. BROCKLEHURST

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## Campus Address

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## Permanent Address

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Harrisburg, PA 17111  
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**OBJECTIVE:** To find a fun and challenging internship in computer vision / graphics for the summer of 2010.

**EDUCATION:** The Pennsylvania State University, University Park, PA.  
Bachelor of Science in Computer Science with a minor in Engineering Entrepreneurship.  
Graduated May 2009. **GPA 3.72/4.00**

The Pennsylvania State University, University Park, PA.  
One semester completed toward a Ph.D. in Computer Science and Engineering.  
Expected graduation date: May 2013.

## RELEVANT COURSES:

**Intro to Computer Vision**  
**Topics in Computer Vision**  
**Computer Graphics**

**Computational Symmetry**  
**Advanced C++ / Java**  
**Data Structures & Algorithms**

**Programming Languages**  
**Software Development**  
**Meshing Techniques**

## EXPERIENCE: **Computer Vision Research Assistant**

Dept. of Computer Science, The Pennsylvania State University, University Park, PA  
Summer 2008 to Present

- Co-authored "Deformed Lattice Detection in Real-World Images" in IEEE Transactions on Pattern Analysis and Machine Intelligence 2009. Available at:  
<http://vision.cse.psu.edu/paper/09pamiPark.pdf>
- Currently involved in projects involving lattice detection, texture synthesis, inpainting, machine learning, symmetry detection, dance synthesis, and 3D reconstruction

## **Teaching Assistant**

Dept. of Computer Science, The Pennsylvania State University, University Park, PA  
Semester of Fall 2009

- Served as teaching assistant for 400-level computer graphics course under Dr. Yanxi Liu
- Conducted six lectures, introducing OpenGL and giving programming instruction
- Troubleshoot programs and aided students with OpenGL assignments

## **ITS Student Programmer**

Information Technology Services, The Pennsylvania State University, University Park, PA  
Summer 2008 to Spring 2009

- Created interactive 3D applications on a polarized stereo display using C++ with OpenGL

## COMPUTER SKILLS:

**C/C++ Programming:** highly experienced, with advanced use of OpenGL, OpenCV, and Qt  
**MATLAB:** significant experience with image processing toolkit for many vision tasks  
**Java Programming:** familiar with the NetBeans IDE and the Derby database system

## HONORS / OTHER ACTIVITIES:

**Dean's List:** awarded for seven out of eight undergraduate semesters

**Video Game Design:** earned 3 credits for Unity3D artwork and scripting for a friend's thesis

**Caricature Artist:** professional caricature artist for four years, current hobbyist