Kyle J. Moore

3605 Kilgo Drive - Durham, NC 27705 USA
✉ kyle@kylejmoore.com ☎ (919) 442-8254
Porfolio: www.kylejmoore.com

Professional Profile

I enjoy building quality products. Computer graphics is my passion. In a job I hope to find a place where I can be a problem solver as well as express my creativity.

2008 – Present
C#
C++
OpenGL
WPF
Subversion

Software Engineer
SMT (SportsMEDIA Technology)

- Core developer of company-wide software framework used for rendering real-time, broadcast-quality graphics integrated with dynamic data.
- Worked extensively to analyze and improve the performance of SMT's OpenGL renderer and video pipeline, and add support for new features and effects.
- Lead developer on multiple software projects, including IsoTrack, a real-time image-based race car tracking system; GOTO Board, a large touch-screen product that allows talent to interact with video and statistics; SMART CableCam, a novel system for inserting a virtual first-down line on the CableCam video feed using image-based pose estimation; and more.
- Led a small team of developers in building the "106 Nation" live heat map feature on BET's *106 & Park*. This involved displaying user-submitted data on a custom Google Maps interface.
- Built a utility to automate in-house QC.
- Worked on several Emmy award-winning productions. SMT's clients include NBC, ESPN, CBS, TNT, HBO, Showtime, Golf Channel, MLB Network, BET, and many more.*

2006 – 2008
Python
OpenGL
Subversion

Graduate Research Assistant, Computational Genetics, Advised by Dr. Leonard McMillan
Dept. of Computer Science, University of North Carolina at Chapel Hill

- Bioinformatics research involving haplotype phasing, SNP compatibility, and identity by descent.
- Created visualization tools to better understand and debug haplotype phasing algorithms.
- Developed an efficient technique for determining compatible SNP intervals across entire genomes.

Wang, J. Moore, K., Zhang, Q. Pardo-Manuel de Villena, F, Wang, W., and McMillan, L. ***Genome-wide compatible SNP intervals and their properties.*** *BCB 2010.*

2006
C#
OpenGL
GLSL

Research Assistant, Advised by Dr. Roger Crawfis
Dept. of Computer Science and Engineering, The Ohio State University

- Developed an interactive volume renderer designed to be user-friendly and remote controllable.
- Became familiar with event handling, multithreading, remoting, and serialization in .NET.

2003 – 2004
PHP
HTML

Webmaster
COSI Academy

- Created new web site from the ground up, with blog-like admin interfaces.
- Supervised a team of high-school students responsible for updating the site's content.

Projects

C#
XNA

Dr. Phase and Haplotype Threading, Xbox Science Course, UNC

- The goal of Xbox Science was to explore the Xbox 360's capabilities as a computation platform and the potential to engage laypeople by turning bioinformatics problems into working games.
- Developed two XNA games, Haplotype Threading, which engages a human's pattern recognition skills to solve for progenitor haplotypes; and Dr. Phase, which attempts to make solving bioinformatics problem fun with a classic arcade game aesthetic. Placed 1st in the project competition.

C++
OpenGL
Ogre

Rawhide Frontier, Advanced Game Design Course, OSU

- Developed a working multiplayer real-time strategy game with network play during a ten week quarter with a six person team using the Ogre graphics engine.

Education

University of North Carolina at Chapel Hill
May 2008 — Master of Science in Computer Science

The Ohio State University **Magna Cum Laude**
June 2006 — Bachelor of Science in Computer Science and Engineering, minor in Business

*Visit www.smt.com for a company overview.