

## Education

### MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Degree: Bachelor of Science in Computer Science and Engineering (Spring 2008)

Cambridge, MA

GPA 4.2 / 5.0

### DAVIESS COUNTY HIGH SCHOOL

Academy: Math / Science

Class Rank: 1 / 350+

Owensboro, KY

SAT: 1580 / 1600

## Work Experience

### MORGAN STANLEY (2008 – present)

New York, NY

As a member of the Credit Risk IT team, create applications that aid business users in assessing risk of current positions. Implement approval workflow processes to ensure compliance with regulations. Contribute in equal parts to UI and backend services codebases, as well as supporting shell scripts. As a trainee project, created an internal version of Twitter to increase knowledge sharing within the firm. **Skills involved:** Java, C#, SQL

### MIT COURSE VI SENIOR PROJECT (2007-2008)

Cambridge, MA

Worked under professor Seth Teller to develop a 3D testing environment for students of the 6.141 robotics lab. Created the ability for students to test their robots without needing access to the limited resources of the lab (robots, lab time reservation), while able to provide realistic feedback for sensors and webcam. Doubled with responsibilities as a lab assistant for the course. **Skills involved:** C++, Java, OpenGL

### TREYARCH (Summer 2007)

Santa Monica, CA

Worked on the Tools and Efficiency team, primarily supporting a open-ended, sandbox project that was unfortunately cancelled. Helped work on an animation transition grammar and parser tool that would help animators collaborate with developers to clearly define animation states. Also ported libraries from unmanaged C++ to managed C++ to better integrate with a migration to the .NET framework for internal tools. **Skills involved:** C#, C++, lex, yacc, bison

### OBSIDIAN ENTERTAINMENT (January 2007)

Irvine, CA

Helped deliver the Neverwinter Nights 2: Mask Of The Betrayer expansion pack. Was responsible for spells and potions data and verification. Also helped playtest levels with the rest of the team. **Skills involved:** various scripting

### EMSENSE (Summer 2006)

Monterey, CA

Worked as one of four software engineers in a start-up environment. Authored a statistical analysis tool that was able to compare the emotional and physical reaction of many testers across multiple categories. Also produced two software demos showcasing the ability to transform data from a remote headset into usable and insightful applications. **Skills involved:** Java

### UNDERGRADUATE RESEARCH (Summer 2005)

Cambridge, MA

Worked in the MIT Media Lab's Sociable Robots group to provide an enhanced vision system for the current study in artificial intelligence, Leonardo the robot. Optimized existing code to improve eye-tracking capabilities of the robot, and produced a prototype pair of glasses with a heads-up-display used to follow eye motion.

**Skills involved:** C++, DirectX

## Leadership

**Phi Sigma Kappa Webmaster:** Produced various flash scripts to add life to the site. Responsible for general upkeep and maintenance of site, email reminder service, and laundry server.

**Phi Sigma Kappa Rush Chair:** Increased the number of new fraternity members from 9 in 2005 to 20 in 2006.

**Freshman Leadership Program Counselor:** Counselor for week-long program for incoming freshmen students to prepare them for leadership positions at MIT.