

Bulut Karakaya

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Career Objective

To obtain a fulltime position as a Gameplay Programmer in the entertainment industry upon graduation in May, 2010.

Education

Expected May 2010	Carnegie Mellon University (CMU) - Entertainment Technologies Center PA, U.S.A
	<ul style="list-style-type: none">• Master Of Entertainment Technology (MET)• Specialized degree program in the interdisciplinary field of entertainment technology.
May 2008	Sabanci University (SU) Istanbul, Turkey
	<ul style="list-style-type: none">• Bachelor of Science degree in Computer Science and Engineering (CS)

Work Experience

Aug 2009 – Dec 2009	Teaching Assistant – Carnegie Mellon University, Pittsburgh, USA
	<ul style="list-style-type: none">• Building Virtual Worlds course.
June 2009 – Aug 2009	Prototype Intern – Stupid Fun Club, Berkeley, USA
	<ul style="list-style-type: none">• Stupid Fun Club is new entertainment think tank company created by Will Wright• Worked on prototypes for unannounced projects using C# and XNA.• Created an interactive website prototype with 3 other interns using flash.
Sept 2007 – June 2008	Teaching Assistant – Sabanci University, Istanbul, Turkey
	<ul style="list-style-type: none">• VA433 3D Modeling course.• VA434 3D Animation course.
July 2007 – Sept 2007	Internship – Microsoft Corporation, Redmond, USA
	<ul style="list-style-type: none">• Twelve weeks as a Software Developer at Test (SDET) on Office Platform.• Used mainly C#

Skills

Proficient:	C++, C#, Python
Competent:	ActionScript 3.0, Java, HLSL / CG
Engines & Libraries:	XNA, OpenGL, GLUT, OSG, Panda3D, Flash
Version Control:	Perforce, SVN
Language:	English (fluent), Turkish (Native)
Others:	Maya, AfterEffects, PhotoShop, Acid Pro

Academic Experience

Projects (CMU)	Fall 2009 – Spring 2010, SurfaceScapes
	<ul style="list-style-type: none">• Creating a Dungeons & Dragons tabletop experience with Microsoft's multi-touch Surface table.• Presented the project at GDC'10 and PAX East.• Worked within a team of seven with different proficiencies.• Handling the networking between laptop and Surface.• Path finding and calculating available movements for the characters.• Participating on design discussions.• Used C# with XNA and WPF.
	Spring 2009, Sketch it up!
	<ul style="list-style-type: none">• It is a software for testing game ideas in minutes with no coding, during idea creating phase of game production.• Presented a demo of "Sketch it up!" at 2009 ICEC (International Conference on Entertainment Computing) in Paris.• Worked within a team of six with different proficiencies in a scrum cycles of two weeks.• Rewrote the network system to make it much more optimized and safe• Added simple shadows to the objects• Added undo, redo, record movement and loop movement functions.• We use Panda3d engine with Python.
	Spring 2009, Game Design
	<ul style="list-style-type: none">• Worked on five different game prototypes in this course.• Worked on a board game with using 4, 6, 8, 10, 12, 20 sided dices.• Unique gameplay which allowed players to choose which dices to play.

Fall 2008, Building Virtual Worlds

- Developed five interactive virtual worlds in two week cycles with a team of four which changes in every round.
- Displayed a BVW world, Mine Cart Adventure in [2008 BVW show](#) and [2008 ICEC](#) reception.
- Used Head Mounted Display (HMD) with magnetic motion trackers.
- Used Playmotion which tracks shadows.
- Used Beyond Question audience voting system.
- We used Panda3d engine with Python.

Projects (SU)

Spring 2008, Graduation Project - Evaluation of Acrophobia with VR Approach

- A virtual reality environment was designed to help the psychiatrist evaluate the patient's acrophobia level.
- Magnetic motion tracks to monitor patient's current position and calculate balance score.
- Programmed in C++ using Open Scene Graph (OSG)

Fall 2007, Artificial Intelligent

- Created a backgammon program that competes against other students' programs through a server.
- Worked in a team of two.
- Programmed in C++

Spring 2007, Art and Computing

- A virtual reality environment was created for experiencing the world through the eyes of a bird.
- The users arm motion is tracked by magnetic motion tracking equipment and thus enable him/her to fly over a city with only swinging arms.
- Worked with OpenGL and low level tracker drivers in C++

Fall 2006, Computer Graphics

- Designed and developed a 3D video game in a team of two.
- 1st prize in Sabanci University [Video Game Competition](#).
- I worked on collision detection, simulated dynamics, multiplayer support over a network, artificial intelligence and 3D sound support.
- Used OpenGL API and GLUT in C++

Interests

Table-top RPG, Dancing (Tango, Latin), Guitar, Violin, Photography, Horsemanship, Skiing
Played over 400 games. ([Link](#))