

ARUNAN RABINDRAN

505 S Claremont Ave, Apt 2

Chicago IL - 60612

312.731.2016

arabin2@uic.edu

www.arunanrabindran.com

SOFTWARE DEVELOPMENT SPECIALIST

Recent college graduate with two Master's degrees eager to pursue passion in a career as a software developer. Possesses excellent technical, research, communications and project management skills. Extremely thorough, versatile, accurate, creative and driven with a constant thirst to learn and contribute.

EDUCATION

Master of Fine Arts in Visualization

University of Illinois at Chicago - Chicago, IL

Master of Science in Computer Science

University of Illinois at Chicago - Chicago, IL

Bachelor of Engineering in Computer Science & Engineering

Anna University - Tamil Nadu, India

TECHNICAL SKILLS

Programming:	C, C++, C#, Java, Objective-C
Web:	AJAX, CSS, Drupal, JQuery, ASP, PHP, XML
Libraries:	OpenGL, iPhone SDK, Android SDK, SDL, DirectX, XNA, Ogre3D, GLSL
Scripting:	Python, Lua, Actionscript, Mel
Software:	Processing, Photoshop, Flash, Illustrator
Database:	MySQL, MS SQL Server
3D Skills:	3D Math, Maya, Wings3D, SketchUp
Version Control:	SVN, Perforce

EMPLOYMENT BACKGROUND

UNIVERSITY OF ILLINOIS AT CHICAGO - CHICAGO, IL

UIC is the largest university in the Chicago area with approximately 26,000 students enrolled in 15 colleges.

Graduate Research Assistant, College of Business Administration

2005 - 2009

- Skillfully performed network administration and maintenance on 20+ Windows and Linux servers consistently meeting all technical and service standards.
- Confidently managed a college-wide IT infrastructure consisting of 400+ terminals, providing superior client service and maximizing the use of resources while minimizing system downtime.
- Expertly developed and deployed web applications in IIS and MS SQL Server (ASP.net, Illustrator, Windows Server 2003, Red Hat Enterprise & Ubuntu Linux) meeting all project objectives.

Graduate Research Assistant, UIC Innovation Center

2008 - 2009

- Major contributor on an interdisciplinary team of five that developed complex usability test scenarios, interaction diagrams, testing methodologies and executed usability tests with human research subjects on a university proprietary virtual prototyping platform for a corporate sponsor (C++, Java, OpenGL, GLSL, Cosmoworlds VRML, Illustrator).

PROJECTS

Master's Project: Finite State Machine Toolkit

- An interactive Finite State Machine Toolkit for building and manipulating state diagrams that represent the brain of an Artificially Intelligent Agent (Avatar) that responds to user inputs including sound commands.
- The application provides a user-friendly interface with a graph representing the state machine for users to add/remove/define states, functionality, transitions and events. Technology: Java, Processing and SCXML.

ProtoSky

- An array of 50 MegaBrite RGB LEDs on the ceiling of the UIC Innovation Center Prototyping Lab using Arduino IDE (based on C), PureData and the Arduino microprocessor.
- Contributor on a team of eight individually responsible for writing the software that controlled an array of LEDs.

AI-AfterLife

- An interactive virtual environment for a touch table called TacTile at EVL for arts research that explores the connection between artificial life forms in the virtual world and the concept of life, death and afterlife (<http://www.vimeo.com/4543190>). Technology: Processing, Java.

Spiropticity

- Conceptualized and modeled a fractals inspired cityscape environment in Maya. Lighting and rendering was done using Mental Ray. Texturing of models was done using Photoshop and Illustrator. Animation of the city being generated was done with a mel script written using pyMel (a mel script binding written in python).

ENDURANCE Mission Data Visualization

- Data visualization software, analyzing ENDURANCE mission data from Lake Bonney collected by an unmanned underwater probe sensing various chemical concentrations. User could interact and see the concentrations of the different chemicals visually and by moving the camera around. Technology: Objective-C and VTK (Visualization Toolkit).

Migraine

- Thesis research to simulate human migration patterns based on geographical niches, topographical data, anthropological studies and the flocking algorithm.
- This was inspired by Dr. Spencer Wells' research for The Genographic Project that traced migration routes based on genetic markers. The simulation uses other archaeological, topological and stochastic data to trace migration routes. Technology: Ogre3D, MapServer, XNA and C#.

Billboard Shader

- A shader to simulate a billboard that switches between images. There was neon lighting around the borders of the billboard which was controlled in the shader by varying the brightness and per-pixel intensity of the pixels in real-time. Technology: GLSL/OpenGL and C.

Earthquake Data Visualization

- Visualization software for earthquake data comprising of seismic activity, latitude, longitude and depth data across Japan over a period of time. The software worked by parsing the data text file and plotting the locations on the GUI. It had some user interaction for camera movement and changing the plot size. Technology: OpenGL and C.

Thermostat Interface

- An application and user interface for simulating the control of a thermostat written in C++ and FLTK (Fast Light Tool Kit) which was used to create the UI elements and program UI response. Basic widget creation, manipulation and event driven code was written for this project during User Interface Design class.

VR Cricket

- An interactive, head and hand tracked virtual reality system built for the C-Wall at the Electronic Visualization Lab in UIC. Designed the concept and game play and was responsible for the scene creation. Created the game physics in a team of three. Technology: Lua & SDL based application called Electro, using ODE (<http://www.vimeo.com/6330475>).

UIC, College of Business Website

- Redesigned the website with custom templates, style sheets and flash animations. Modified website content using Illustrator and Photoshop. Created and maintained ASP pages for applications like inventory management, voucher reconciliation and course registration. Deployed, installed and maintained The College of Business' photo repository using the Gallery server. (<http://www.uic.edu/cba>).

ACHIEVEMENTS & AWARDS

President of the Indian Graduate Students Association (Fall 2006)

Vice Chancellor's Student Service Award (Fall 2007)

All-round Efficiency Award (High School)

Proficiency in English Award (High School)