Erick Jovany Andres

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EDUCATION

University of California, Berkeley   Berkeley, CA
*Bachelor, Computer Science **GPA: 2.85***   September 2013 - June 2017

EXPERIENCE

Xumak LLC   Ontario, CA
Web Developer   July 2014 - September 2014
Used Java Servlets and MongoDB to create simple web applications that stores information from user in an html form to the database.

Incorporated knowledge of java servlets & jsp to work with Magnolia CMS framework to produce components in a website.

SKILLS

Proficient: Java, Python, C, MIPS Assembly, Linux Experience, Objective-C

Familiar with: Javascript, Scheme, C++, Apache Spark (MapReduce), HTML5/CSS3

Development Tools: MongoDB, Git, Eclipse IDE, Magnolia CMS System, Apache Tomcat, Apache Maven

PROJECTS

PAC-MAN: Implemented search algorithms such as Depth First Search, A* Search, Expectimax Search along with others and applied them to Pacman scenarios. Also, designed a non-trivial, consistent heuristic alongside an evaluation function. Moreover, incorporate ideas such as value iteration and Q-learning to our game agents along with inference algorithms for Bayes Nets, specifically variable elimination and likelihood weighting sampling. (Python, CS188)

Network (The Game): Implemented a program that plays the game Network against a human player or another computer program. Divided the programming task into encapsulated modules, designed interfaces between them, and documented these interfaces. (Java, CS61B)

Image Depth Perception: Implemented a computer vision algorithm that generates displacement maps from stereo images. Then looked at compressing the displacement maps using a quadtree data structure. Used displacement maps to generate so called, random dot autostereograms. Optimized the depth map generator further through performance optimization techniques such as parallelization through Intel SSE Intrinsics & Multi-threaded OpenMP, where performance was measured in GFlop/s. (C, MIPS Assembly, CS61C)

RELEVANT COURSES

Structure & Interpretation of Computer Programs (CS61A)
Data Structures (CS61B)
Machine Structures (CS61C)
Macintosh Student Developers for OSX (CS98)
Discrete Mathematics and Probability Theory (CS70)
Intro to Artificial Intelligence (CS188)

ACTIVITIES

Berkeley Science Network Student   Fall 2013-present
Hispanic Engineers & Scientists Member   Fall 2013-present
Computer Science Scholars Program   Fall 2013-Fall 2014