

HUGO LUÍS ANDRADE SILVA

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Profile

Hard-working computer engineering student with a background that includes topics such as Machine Learning, Image Processing, Computer Architecture, Signals and Systems and Digital Systems Design. Pursuing summer internships.

Education

Columbia University, New York City

Sep 2014 – Present

Computer Engineering, Non-degree international Student, GPA: 4.0264/4.33

Brazil Scientific Mobility Program, fully funded scholarship recipient

April 2014

University of Brasília, Brasília, Brazil

Mar 2012 - Aug 2014

Bachelor of Science, Computer Engineering, GPA: 3.66/4.00

Relevant Coursework

Machine Learning

Computer Architecture

Assemblers

Image Processing

Electric Circuits

Linkers

Digital System Design

Signals and Systems

Loaders

Project Experience

Visual Interfaces to Computers, Columbia University, New York, NY

Feb 2014

- Designed real-time hand tracker and simple gesture recognizer for visual password interface
- Applied techniques such as background-subtraction and erosion to make algorithm work for any background and hand position
- Tested on different settings with high success rate

May 2014

Image Processing, University of Brasília, Brazil

- Projected hand-gesture recognition system for a Rock-Paper-Scissor-Lizard-Spock game using webcam
- Extracted features such as number of fingers raised, presence of thumb and ratio between height and width
- Designed architecture of the Neural Network used for classification
- Collected data used to train the Neural Network

Skills

Programming:

C, C++, Matlab, C#, Python, Scala, Verilog, VHDL, Assembly MIPS, Assembly x86, Assembly 8051, OpenGL, OpenCV

Applications:

Microsoft Word, Powerpoint, ShareLatex, TortoiseSVN, Maple, Grace, Quartus, VHDL Simili, Weka, Linux

Languages:

Native Brazilian Portuguese and Advanced English

Additional Information

J-1 sponsorship and work authorization provided by the Institute of International Education

TA for the Computer Architecture course and the Data Structures course at the University of Brasilia