120 Saint Albans Dr. 423
Raleigh, North Carolina, 27609

REINALDO CRUZ

(787) 633-0392
reinaldo422@gmail.com

www.reicruz.com

EDUCATION

Georgia Institute of Technology **Atlanta, GA** **August 2016 – Present**

- Pursuing Online M.S. in Computer Science, GPA: 4.00.
- Coursework: Machine Learning; Knowledge-Based AI; Software Development Process.

Georgia Institute of Technology **Atlanta, GA** **August 2011 – May 2015**

- B.S. in Computer Engineering, GPA: 3.56.
- Graduated with Highest Honors; received Provost Merit Scholarship every semester.
- Coursework: Algorithms; Artificial Intelligence; Data Structures; Comp. Architecture; Networking; Security; OO Design.

EMPLOYMENT

Software Engineer **IBM** **August 2015 – Present**

- Currently working on integrating Softlayer with Bluemix to create one unified cloud experience.
- Worked on Cloudbot, a cognitive chat-bot platform built on Github's Hubot framework that integrates services and tools into a development or operations team's workflow in a collaborative chat environment.
- Developed iOS chat application that allows users to communicate with Cloudbot.
- Assisted with the integration of noise reduction and data smoothing algorithms into an indoor sensing platform using Spark and created data visualization tools to display live location data streams.
- Contributed to MFP8, a node.js command-line based application that allows users to interact with a RESTful backend to create and manage hybrid mobile applications and support enterprise server operations.

Software Engineer Intern **Intel Corporation** **May 2014 – August 2014**

- Part of the graphics debugging team within the Visual Parallel Computing group working on software validation.
- Developed ADFT, a tool that consolidates routines for debugging Android devices into features that can be toggled, modified and stored in a central database.
- Built a command-line tool that searches for duplicate bugs within the company's high speed database, reducing search time and unnecessary work on similar bugs.

Software Engineer Intern **Georgia Tech Research Institute** **January 2013 – May 2013**

- Part of Georgia Tech's ALQ-213 development team working on software/hardware for military aircrafts.
- Built a command-line tool for creating random military scenarios on a radar based on the user's input, reducing the time to create such scenario test cases by hours.
- Developed graph generating tool which takes flight test data and displays which of the aircraft's zones are faulty.

PROJECTS **github: reicruz**

Raven's Progressive Matrix AI Agent **August 2016 – December 2016**

- Knowledge-Based Artificial Intelligence course project; visual test solving agent built using Python and Pillow.
- Agent constructed from scratch distinguishes different shapes in images, constructs knowledge representations of their properties, and successfully reasons over a series of choices until finding the correct answer.
- Connected components in images are extracted using variations of both BFS and DFS algorithms.

Internet of Things – SHM **August 2014 – May 2015**

- Senior design capstone project; structural health monitoring system using an internet-of-things approach.
- Mesh network made up of Raspberry Pi gateway host and Arduino nodes communicates with server via Kafka.
- Data is distributed across Apache Storm system in order to run sci-kit learning algorithms in real-time.
- Structure's health stored in a MongoDB database and accessed by Django web application.

Hello Glass **August 2014 – December 2014**

- Four-wheel robot controlled using Google Glass.
- Glass Android application displays robot's location info and uses accelerometer data to send commands over Bluetooth.
- Embedded C++ program gives robot access to all connected components (motor, camera, compass, Bluetooth).

SKILLS AND INTERESTS

- **Languages and Technologies–** JavaScript, Node, Java, Python, C, HTML, CSS, SQL, Spark, Kafka
- **Operating Systems –** Mac OSX, Windows XP/Vista/7/8, Linux Ubuntu/Backtrack5/Kali
- **Communications –** Fully bilingual in Spanish and English. Presentations to peers, clients and students