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REINALDO CRUZ

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EDUCATION

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

- B.S. in Computer Engineering, GPA: 3.56.
- Graduated with Highest Honors, receiving Dean's List award every semester.
- Coursework: Algorithms; Artificial Intelligence; Data Structures; Comp. Architecture; Networking; Security; OO Design.

EMPLOYMENT

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

- Part of IBM Cloud's Mobile First Platform working on data analytics tools for Presence Insights.
- Working on integrating noise reduction and data smoothing algorithms with Spark to cleanse Wi-Fi based location data in order to increase positioning accuracy in our existing indoor sensing platform.
- Contributed to MFP8, a node.js CLI 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 utility to search 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 creates a clean visualization demonstrating which of the aircraft's zones are faulty.

PROJECTS **github: reinaldo422**

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**

- Control a Sparkfun Magician Robot with 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)

Risk Web Application **May 2013 – August 2013**

- Web implementation of the board game Risk but in a galactic setting.
- Server-side includes Java as the driver language for the application and JSP's for routing.
- Client-side includes a dynamic interface built using HTML5, CSS and jQuery.

SKILLS AND INTERESTS

- **Languages and Technologies–** Javascript, node.js, Java, Python, Scala, C, HTML, CSS, SQL, Spark, Kafka
- **Operating Systems –** Linux Ubuntu/Backtrack5/Kali, Windows XP/Vista/7/8, Mac OSX
- **Communications –** Fully bilingual in Spanish and English. Presentations to peers, clients and students
- **Hobbies –** Travelling, snowboarding, sports, reading, programming

ADDITIONAL EXPERIENCE AND ACHIEVEMENTS

- **Georgia Tech Provost Merit Scholarship** – 1 of 40 recipients
- **HEENAC Merit Scholarship** – 1 of 85 recipients
- **Tau Kappa Epsilon Fraternity, Officer** – Increased on-campus involvement and achieved top 5 organization GPA