

# Lazaro Herrera

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## LINKS

LinkedIn: /lazaroherreira  
Github: /WriteCodeEveryday  
Personal Site: /PersonalSite

## TECHNOLOGIES

### PAST TECHNOLOGIES

Bitcoin • Blockchain Technology  
Java • Python • Javascript/NodeJS  
ReactJS • Rails/Ruby • PHP  
SQL • MySQL • SQLite • DB2  
Redis • ActionCable/Websocket  
BB 10 • iOS • Android • PhoneGap  
REST Services • JSON • XML • JWT  
JUnit • TestNG • Selenium • Robot  
Maven • Ant • JIRA • SVN • Git • Perforce

## EDUCATION

### FLORIDA INT. UNIVERSITY

#### BS IN COMPUTER SCIENCE

Miami, Florida  
College of Engineering

#### MS IN CYBERSECURITY

Miami, Florida  
College of Engineering

### COURSES

Senior Project I/II • Database Theory  
Operating Systems • Parallel Computing  
Software Testing/Engineering I/II  
Secure Application Programming  
Advanced Malware Reverse Engineering  
Advanced Ethical Hacking  
Advanced Digital Forensics

### PROJECTS

Semantic-Web Intel. Inference Engine  
CUDA GPU SuperResolution  
Java Software Testing with JUnit  
Tomcat Social Network  
Development/Testing

### CERTIFICATIONS

Six Sigma White

## PUBLICATIONS

### RESEARCH PAPERS

INDOOR ROBOTIC AIR AQUARIUMS  
Authors: Herrera, Peleato Sosa, Dr Kim  
FCRAR Proceedings 2012 - May 2012

## EXPERIENCE

### BITSTOP.CO | SENIOR SOFTWARE ENGINEER / CTO

January 2016 - Present | Miami, Florida

Core Technologies: Ruby/Rails/Javascript/Bitcoin/PGP/ActionCable

- Wrote BitcoinD webscraper for extracting third party ATM transactions.
- Rewrote internal backend application as Software as a Service.
- Wrote 2FA solution using email-based PGP and SMS-based auth codes.
- Wrote websocket-capable public pricing API with ActionCable.
- Wrote backend solution for remittance application to Mexico.
- Wrote ELO ranking algorithm for classifying customers.
- Wrote modular Rails ATM solution for Gen-Mega / Kiosk ATMs.

### BITSTOP.CO | SOFTWARE ENGINEER

July 2015 - January 2016 | Miami, Florida

Core Technologies: Ruby on Rails/NodeJS/Android/Bitcoin/Computer Vision

- Redesigned Bitstop.co website using Javascript, JQuery and Ruby on Rails.
- Optimized ID PDF-417 identification using Computer Vision techniques.
- Wrote MRZ-Reader for US/Foreign Passports in Javascript.
- Created Bitstop Android wallet using Java and Bitcoin.
- Wrote frontend for bank payments on top of Rails REST endpoints.
- Wrote NodeJS/Rails remote control system for command-control of hardware.

### FOCUS TECHNOLOGIES | SOFTWARE ENGINEER I

December 2013 - July 2015 | Sunrise, Florida

- Increased smoke test accuracy to 99 percent and reduced execution time.
- Created keyword-driven bot to execute tests over Hipchat.
- Created Chrome REST-service based duplication system for testing.
- Created WYSIWYG system for verifying PDF output in legally binding output.
- Created SQL integrity tooling for snapshots and change detection.
- Create Redis database tooling for verifying internal structure and values.

### RIM - BLACKBERRY | IOT AUTOMATION DEVELOPER

Aug 2013 - Dec 2013 | Sunrise, Florida

Core Technologies: Python/Robot Framework

- Wrote IOT Wifi Testing Suite to test wifi chip firmware.
- Integrated initial IOT Wifi Testing Suite with automated build system

### GAME DEVELOPERS GUILD | SOFTWARE DEVELOPER

Dec 2011 - Aug 2013 | Miami, Florida

Core Technologies: Java/Unity C#/Android/PhoneGap

- Hosted Global Game Jam for the years of 2012 through 2015.
- Winners of EdHack Hackathon 2014 "Beepo" using Unity C#.
- Winners of ATT Mobile App Hackathon 2012 "Spheromon" using Unity C#.
- Participated in developer events creating mobile apps for Blackberry/Android.

## RESEARCH

### FLORIDA INT. UNIVERSITY - DISCOVERY LAB | HEAD STUDENT

#### RESEARCHER / SOFTWARE DEVELOPER

Jan 2011 - Aug 2013 | Miami, Florida

Core Technologies: Arduino/C#/C

- Created UAV with vehicle avoidance using short-range sonar.
- Created software for human size robot that utilized Kinect and ArduinoBT.