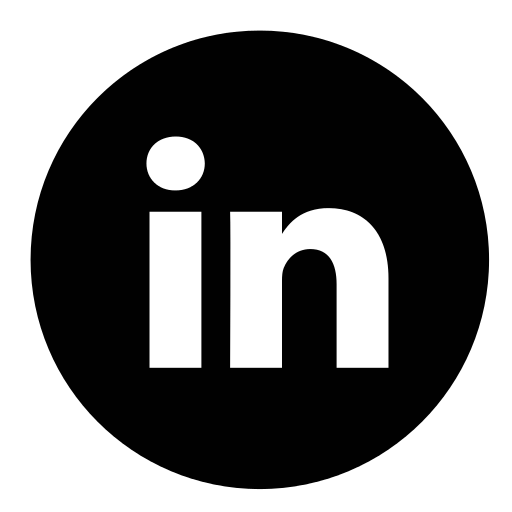
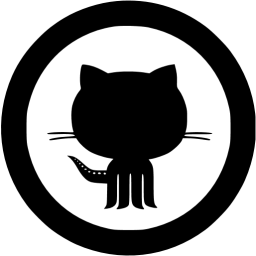
Konstantino Sparakis



(718) 508 2663

ksparakis@gmail.com

<https://www.linkedin.com/in/sparakis> 

<https://github.com/ksparakis/> 

COmputer Engineer

## EDUCATION

**Boston University**

***September 2016***

**Bachelors, BS Computer Engineering**

**Minor, Business Administration**

***Expected May 2017***

**Masters, MS of Computer Engineering**

### Fluent Spoken Languages

**English, Greek & Spanish**

### Areas Of Interest

**Cloud Computing, Cyber Security, Distributed Systems, Embedded Systems, & Operating Systems**

### Computer Languages

**Asp .Net, Bash, C, C#, C++, CSS, Html, JQuery, Java, JavaScript, Node JS, Objective-C, Php, Python, Ruby, & SQL.**

### Technical Skills

**AWS, Computer Architecture, Digital Logic, Docker, Full Stack Dev., IOT, Kernel Dev., Microprocessors, Mobile Dev., Object Oriented Programing, REST API’s, Scrum, Unix Terminal, Virtualization**

## EXPERIENCE

Software & Security Eng. Intern

Lexumo | Boston, MA

March 2016 – present

Perfecting Lexumo’s client software, which streams compilation data to their cloud where it can be checked for open source vulnerabilities.

* Ensuring compatibility with majority of Unix Operating Systems, by creating portable binaries and adding static libraries.
* Restructuring and organizing client Python code for expansion to interpreting more languages.
* Creating a unit test suit for automated testing.

Software Engineering Intern

Carbonite | Boston, MA

May 2015 – Jan 2016

**Cloud Infrastructure Team**

* Amazon Web Services
  + Finding limitations of AWS
  + Communicating with AWS support engineers for solutions.
  + Using Key Management Service for data encryption.
  + Researching Lambda and API Gateway for scalable backend.
  + Implemented method for using S3 bucket as a virtual hard drive within a private network using Avahi.
  + Researching & Implementing VPC for security.
* Writing scripts for customer usage analytics in Ruby and Bash.
* Researching and testing methods of recovering a physical machine from a cloud back up.
  + Booting from & modifying VHD image to inject software and scripts
* API design using Swagger.
* Created Microsoft PowerShell applets for multiple use cases.

**Quality and Assurance Team**

* Working with Jenkins to launch automated test suits in Amazon Web Services for backup hardware appliance product.
  + Ruby script that installs all software to emulate stands alone hardware on EC2.
  + Working with EC2 boot scripts.

## PROJECTS

APEKIT: Android Vulnerability Analysis

**Fall 2015**

* Python Pipeline that reverses engineers Android APK’s to source code, & statically analyzes for vulnerabilities.
* Analyzed over 1000 Android applications
* Discovered API keys including Amazon Web Service keys.

**Sundial: Solar Unit Monitoring**

**Fall 2015- May 2016**

* Hardware-to-Cloud solution for monitoring solar units power usage in rural Africa.
  + Created Custom PCB interfaced with zigbee like chip for star network communication that plugs into solar unit.
* Deployed for Oolu Solar in Senegal, Africa that manages 200+ rural villages and growing.
* Architected and Implemented Java Android application.
* Sugar ORM for SQLite DB
* LoopJ Asynchronous Http Methods Library for api communication.
* Assisted architecture of PostgreSQL DB data model & Restful API routes

**ReClo: Cloud Disaster Recovery**

**Spring 2015**

* Architected & implemented a proof of concept, in collaboration with Carbonite.
* Presented & Demoed in Massachusetts Open Cloud Conference
* C# Windows Clients
* Backs up users’ computer to Amazon Web Services S3 as a VHD image.
* Restore client communicates with backend to start process of converting VHD image to an EC2 virtual machine in AWS, which connects back to user via vpn.
* Backend consists of Node JS Restful API, built using Express.

**Ambios: Dynamic Ambient lighting for computer monitor**

**Spring 2015**

* Used port sniffer to find protocol used by Prismatik software, which live captures color displayed on monitor and sends it via serial port to hardware.
* Using a Texas Instrument MSP430 microprocessor programmed in C & custom circuit design attached to Led Strips, emulated a Prismatik compatible device to intercept color information and display it on LED strip.

**24 Hands: Embedded Systems**

**Spring 2015**

* 7 Segment display created by moving a single clock hand into proper position.
* 24 Stepper motors controlled by custom logic circuit connected to a raspberry pi & Gumstix embedded processor.
* I2C communication between Gumstix and Raspberry pi
* Ti watch with accelerometer and RF communication sends commands of what to display via gestures.

**Networking in the Physical World**

**Fall 2014**

Collection of Internet of things Projects based off of Sun Systems Sun Spot microcontrollers.

* Report room temperature to cloud infrastructure and display live and historic data view via custom web interface.
  + Php backend with MySQL DB
* Using Radio Frequency Strength indicator for indoor localization with live web view
  + Matlab calculation for localization algorithms.
  + Java socket & Php – MySql Backend
* Controlling a servos car Wirelessly with a sunspot
  + Custom Android application to control car via Java Socket
* Created a wall following algorithm for servos self-driving automated car.